### Distribution:

W. Abdul	ORP	H6-60
S. L. Charboneau	ORP	H6-60
F. B. Hidden	ORP	H6-60
L. A. Huffman	ORP	H6-60
J. M. Johnson	ORP	H6-60
C. J. Kemp	ORP	H6-60
D.P. Knight	ORP	H6-60
R. W. Lober	ORP	H6-60
J. J. Lynch	ORP	H6-60
D. L. Noyes	ORP	H6-60
G. B. Olsen	ORP	H6-60
R. W. Russell	ORP	H6-60
S. C. Stubblebine	ORP	H6-60
W. J. Taylor	ORP	H6-60
G. D. Trenchard	ORP	H6-60
J. S. Trent	ORP	H6-60
J.D. Young	ORP	H6-60
D. Becker	Ecology	H0-57
R.K. Biyani	Ecology	H0-57
T.Z. Gao	Ecology	H0-57
J. J. Lyon	Ecology	H0-57
J. D. McDonald	Ecology	H0-57
D.W. Mears	Ecology	H0-57
J. Price	Ecology	H0-57
H.M. Bowers	WRPS	R1-51
J.W. Donnelly	WRPS	R1-51
J. J. Luke	WRPS	R1-51
S. E. Killoy	WRPS	E6-20
R. J. Skwarek	WRPS	R2-50
K. J. SKWarek	WKL2	KZ-30
R. A. Kaldor	MSA	A5-11
T. W. Noland	MSA	H7-28
R. E. Piippo	MSA	H7-28
* *		

ADMINISTRATIVE RECORD – Heather Childers: H6-08

6-08 MAY U 3 2011

Please send comments on distribution list to Woody Russell (Woody Russell@orp.doe.gov).

The undersigned indicate by their signatures that these meeting minutes reflect the actual occurrences of the above dated Project Managers Meeting.

	3 2	
	By Lober, DOE-ORP	Date: 4/26/2011
	1960 Eddel, Boll-Old	
	Chris Kemp, DOE-ORP	Date: 4/26/11
	Chris Kemp, DOE-ORP	
	Waln Abril	Date: $4/26/11$
	Wahed Abdul, DOE-ORP	
	Jeff Trent, DOE-ORP	Date: 4/26/11
	Jeff Trent, DOE-ORP	
	Sel Bruger	Date: 4/26/11
FOR	GarylOlsen, DOP-ORP	, ,
	le the the	Date: 4/26/11
	J. Lyon, Project Manager, Washington State Department of Ecology	1
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	Mrseam for	Date: 4/26/4
	J. D. McDonald. Project Manager,	1
	Washington State Department of Ecology	

Purpose: ORP Project Managers Meeting

### **Table of Contents**

Meeting Minutes	8 Pages
Attachment A, Action Tracking	3 Pages
Attachment B, List of Attendees	3 Pages
Attachment C, Presentation Materials	75 Pages

### 1.0 Administrative Items

Previous meeting minutes approval: The January 24-25, 2011 Project Managers Meeting (PMM) minutes were approved.

### 2.0 Review of the ORP Project Summary

### Action Item List

There were three new action items established: 1) ORP took an action to include the IS-1 issue as an agenda item at the weekly closure planning meeting held on Tuesdays; 2) ORP took an action to provide Ecology a response to the question regarding negative and positive float in the C-Farm life cycle baseline schedule; 3) ORP will schedule a meeting with Ecology to establish the process for discussions regarding the Retrieval Technology Roadmap and the second and third technology

### Key Documents List

ORP provided Ecology an updated table of key documents. The list will be updated as-needed and sent electronically to Ecology. Ecology requested inclusion of DOE-RL documents that are related to tank farms. ORP responded that it will work with DOE-RL to come up with a solution in an effort to be responsive to Ecology's request. ORP noted that DOE-RL maintains a key document list.

### **Tank Farms**

Ecology noted that no representative from the integration group for Tank Farms and the Waste Treatment Plant (WTP) was present, and reiterated the request to begin discussions regarding planning and implementation for early LAW startup and hot start of WTP.

<u>Tri-Party Agreement and Consent Decree (TPA and CD) Statistics/Status</u>: ORP stated that there was no new information to provide on statistics/status.

M-045-58: ORP reported that Ecology raised a concern regarding the need for additional milestones for outyear RFI work. ORP is addressing the concern via commitments in Milestone M-045-84, and the scope is in place for next RFI in WMA A/AX and Data Quality Objectives (DQO) that are currently under way.

<u>M-045-60</u>: Ecology and ORP have agreed upon a number of modifications to the Work Plan, and the modifications have been documented in the Administrative Record (AR).

<u>M-045-61</u>: ORP has initiated the process for interpretation of the work done to date, developing content, outline and expectation with the regulators on the RFI/CMS report for WMA C.

<u>M-045-92</u>: The SX interim barrier design is 90 percent complete. A change package is in concurrence to move the construction finish date from June 12 to October 12, which will take advantage of the summer months.

### Significant Past Accomplishments:

- Direct push characterization in C Farm is currently working a diagonal push under tank C-104. An angle push is planned at tank C-101 in the A site. Push characterization in the B site location will be started when the C-104 pumping is completed.
- Regarding surface geophysical exploration (SGE) data collection in UPR-82, ORP is coordinating schedules with DOE-RL, which is conducting a similar resistivity deployment in the Liquid Effluent Retention Facility (LERF). ORP still has the 2-D data collection to complete, and will be working with LERF to get the electrical resources in line. This has created a slight slip in schedule.

### M-45-00: Series

<u>TPA-SST Retrieval and Closure</u>: Ecology inquired about the status of the IS-1 issue. ORP did not have a current update. **ORP took an action to include the IS-1 issue as an agenda item at the weekly closure planning meeting held on Tuesdays**.

<u>C-Farm Critical Path Schedule:</u> C Farm critical path schedule activities are logically tied; schedule provided is generated and maintained by the contractor – WRPS; inputs are provided to ORP monthly. Ecology noted that in some areas of the schedule the actual work line (blue) is longer than the baseline (yellow) activities, Ecology asked if that indicates the work will take longer than expected? ORP suggested that activities durations are planned and certain variables may decrease or increase scope duration. Activities that are logically tied and or constrained to start or finish once an activity is completed may reveal either a positive or negative float. Ecology inquired about the negative 73 float in the schedule for the DST receives tank 3 design. **ORP took an action to provide Ecology activity variation explanations regarding C-Farm critical path** 

schedule negative and positive float changes by month. ORP noted that there are weekly meetings with Ecology that provide a status on the retrieval schedule.

<u>Tank 241-S-102</u>: ORP is not operating to retrieve Tank S-102, and there are ongoing discussions about substituting a tenth tank in A/AX for Tank S-102. A meeting with Ecology is scheduled tomorrow (3-23-11) for further discussions. ORP is planning to submit a change package for the tank substitution, and will be soliciting input from Ecology prior to formally submitting the change package.

<u>CD-SST Retrieval and Closure</u>: D-00B-02 - A meeting is scheduled tomorrow (3-23-11) with Ecology, and discussion points include cost, funding, infrastructure, and tank A-105.

### Significant Planned Activities in the Next Six Months:

• There was a slurry pump failure in tank C-104, and it should be replaced and operational by next week.

TWRWP Status: ORP noted a correction to the first issue, which should read "Ecology requested a schedule for any future TWRWP changes." ORP has taken the action to provide Ecology a schedule for any future TWRWP changes. ORP stated that preparations are being made to initiate discussions with Ecology within a month on the issue regarding the Retrieval Technology Roadmap and the second and third technology. Ecology cautioned ORP to proceed in a collaborative manner. ORP suggested holding a premeeting with Ecology to ensure the parties understand and agree on the way to proceed. Ecology asked if that would be considered an action, and ORP concurred. ORP will schedule a meeting with Ecology to establish the process for discussions regarding the Retrieval Technology Roadmap and the second and third technology.

M-045-91, SST Integrity Assurance: All of the milestones are currently on schedule. M-045-91G-T05 was completed, which was to conduct a visual inspection of 12 SSTs and provide a report. ORP noted that the report is being tracked on the key documents list, and Ecology stated that a letter will be submitted for TPA purposes to document completion of the target milestone.

<u>Significant Planned Actions in the Next Six Months</u>: ORP distributed a schedule for the planned activities. The activities highlighted in red are planned for this year. ORP will also provide an electronic copy of the schedule.

Interim Stabilization Consent Decree: The Court signed documentation for completion of interim stabilization on March 8, 2011. This TPA D-001-00 milestones series will be terminated. ORP stated that the status of this milestone series will be carried through this quarterly report. A discussion with ORP legal to determine the appropriate final action to document closure is under way.

In Tank Characterization and Summary: Ecology requested information regarding the waste feed delivery DQO process, specifically the personnel from Ecology involved, how often meetings are held, and when the next meeting is scheduled. Ecology asked for a meeting to gain more information regarding the supplemental pretreatment initiatives and a possible site plan for proposed areas for near tank facilities. Ecology noted that when ORP delivers a schedule indicating when permitting might occur with the WTP facilities, some of the pieces of integration will be provided. Ecology asked about options ORP is considering for secondary waste, high level storage, what will occur in or next to the tanks farms, and how those issues will play into LAW. ORP responded that an update on secondary waste will be provided later during today's meeting.

System Plan: ORP reported that a meeting was held with Ecology two weeks ago to discuss the preliminary baseline case results, which was provided by WRPS technical staff. An evaluation of the baseline case will be presented to Ecology tomorrow (3-23-11). Ecology noted that subsequent to the initiative assumptions for System Plan 5, the 2016 vision for early startup of LAW transpired, resulting in a system plan that would not occur. Ecology asked if ORP could prevail upon upper management to be more responsive to changes to ensure that the system plan remains relevant. ORP indicated that it would take Ecology's request under consideration. ORP noted that it has just received the initial path forward for the 2020 vision (including early LAW startup) from BNI and WRPS, which ORP senior management will be reviewing. If ORP accepts the path forward, contractual direction will be given to BNI and WRPS to prepare a certified cost and pricing proposal, which would be a time-consuming process. ORP does not anticipate receipt of the proposal until the August 2011 time frame, in which case System Plan 6 will not be in a position to incorporate the proposed outcome for the 2020 vision. ORP took an action to provide Ecology more information at the next PMM on the path forward for the 2020 vision. It was noted that the 2020 vision is one of the scenarios (case No. 5) for System Plan 6.

<u>Tank Operations Contract (TOC) Overview</u>: ORP provided an overview of the unfavorable schedule and cost variances for the current month (January) and contract-to-date, and the favorable

contract-to-date cost variances. Ecology inquired about any impact to the schedule resulting from the delay with the waste feed delivery flow sheet. **ORP took an action to provide Ecology that information**.

Complete Acquisition of New Facilities and Submit Part B Permit Applications: ORP reported that an email was received from Headquarters approving the Critical Decision-0 (CD-0) packages for the Interim Hanford Storage Facility and secondary waste treatment, and ORP has authorized its contractors to proceed with activities. Project meetings will be established, as well as IPT charters and the process in accordance to DOE-413.1B will get under way. Ecology requested assistance with understanding the requirements for interim milestones M-45-00, M-47-00, M-62-00 series, and M-90-00. **ORP took an action to schedule a meeting with Ecology to share information and solicit feedback from Ecology for the Interim Hanford Storage**Facility, secondary waste, and supplemental treatment. Ecology noted an error on page 32 in the TPA handout under milestone M-047-06. The M-045-00 should be corrected to read M-047-00.

ORP stated that the third Hanford waste sample was sent to Savannah River National Lab, where the bench scale steam reforming tests are being conducted. ORP noted that the CD-0 approval for supplemental treatment has been received from Headquarters. ORP is moving ahead with the down-selection process for the treatment part of the supplemental treatment and immobilization. The goal is to have CD-1 status on the pretreatment part by the end of this fiscal year (9-30-11) and on the immobilization part by approximately June 2012. Ecology asked if discussion about supplemental treatment means supplemental pretreatment or immobilization. ORP responded that the words supplemental treatment and immobilization are used in discussion, followed by a description of what takes place in each part. ORP stated that pretreatment is the intent when the word treatment is used in discussion.

### **Waste Treatment Plant**

ORP reported that TPA Milestone M-062-20, resolution and closure of the External Flowsheet Review Team (EFRT) issues, has been closed. ORP has given direction to BNI that it is responsible for Milestone M-062-49, which requires certification of the WTP design (Pretreatment, High Level Waste and the WTP LAW component) by October 2011. ORP added that the design document will identify the treatment capacity of second LAW, but not what the technology will be. The design report will not reflect the potential for the early LAW initiative since BNI and WRPS submitted the proposal to ORP today.

The percent complete numbers for the WTP project were reduced slightly due to incorporation of baseline changes. All of the scope has been incorporated into the baseline for resolution of the technical issues through design modifications to the tanks from both seismic and mixing, and closure of the technical issues as well as the sequential Operational Readiness Review (ORR). The only remaining scope that is not completely in the baseline is the large scale testing activity, which is currently being defined.

### Pretreatment (PT) Facility

ORP reported that construction is performing well in general, with a slight negative cost performance. The next six months are projected to be on the positive side. Following the technical issues resolution and system modifications, 269 Piping and Isometric Drawings (P&IDs) will need to be re-issued this year, and 44 P&IDs have been issued so far.ORP stated that it is in the process of providing a complete answer to Ecology's question about whether the flow sheet model included the second LAW recycle that will come into Pretreatment. ORP stated that the flow sheet model does not include that, and BNI has been asked to provide clarification about the assumptions for second LAW recycle.

Ecology asked if ORP has considered what the supplemental pretreatment process train will look like for startup of early LAW. ORP stated that it has been considered, but that scope is within the Tank Farms' project, not WTP's. However, the point of contact for integration between Tank Farms and WTP is providing coordination between the two projects.

### Significant Planned Actions in the Next Six Months:

ORP stated that planning for the Large Scale testing is under way. Ecology asked if a schedule is available for the Large Scale testing. ORP responded that there is a preliminary schedule, but by

the end of April 2011, the schedule will have more detail after the planning and strategy are solidified.

### <u>Issues</u>

One of the main issues is completion of the Process Vessel Vent (PVV) and the Pretreatment Vessel Vent Process (PVP) analysis and design modifications. An evaluation of the calculation of the HEPA filter load is ongoing, and testing is being planned to determine whether the particle reduction in the filtration system can be increased. Additional equipment that would need to be placed in the black cell poses a challenge with equipment operation and maintenance.

The Feed Receipt Vessel (FRP) design may need some modification at the bottom of the vessel due to stringent seismic and structural loading analysis.

### **High Level Waste**

The focus continues on the buildout of the filter cave, which has transitioned to the installation phase.

### Significant Planned Actions in the Next Six Months:

- The C5 ventilation and offgas system equipment will be delivered to support construction schedules.
- The contract for vessel RLD-7 will be awarded in April 2011.

<u>Issues</u>: Delivery of the material required to build the dampers that get attached to the filter housings has been delayed by about a month. The delay has caused a compression of the construction schedule to accommodate delivery of the dampers in the July and August 2011 time frame. Ecology asked if there is any float to the schedule. ORP responded that there is no float; however, the critical path is being maintained. ORP noted that the construction schedule is based on a four-day work week, and two additional days can be added if the construction schedule starts to be impacted.

Ecology asked if the stringent restrictions will be maintained for crane usage. ORP explained that the restriction does not allow two cranes to operate in the same air space concurrently. All of the cranes are available for use, but not simultaneously in the same air space. Once the training is

completed and BNI is satisfied that no contact between cranes will occur, the restriction will be lifted. This should occur by early April.

Delivery of some embeds is being monitored that could potentially impact construction of the filter cave walls. However, the embeds are expected to arrive at the end of March 2011, which will mitigate any impact.

### Low Activity Waste Facility (LAW)

### Significant Planned Actions in the Next Six Months

ORP reported that there were quality issues associated with the fabrication vendor for the carbon bed adsorber (CBA), but those issues have been resolved and the CBA has been released for fabrication.

### Analytical Laboratory (LAB)

Ecology asked about the high numbers for engineering, procurement and construction, but the low number for overall facility complete (46%). ORP explained that the overall facility complete is 68% without commissioning, which include the costs for analytical methods and startup procedures for running the analytical equipment.

### Significant Past Accomplishments

Ecology inquired about the quality approval associated with the release to ship integrated control network enclosure controllers. ORP stated that it has personnel at the vendor shop to inspect the equipment, and it is inspected again after arrival to ensure there is no shipping damage.

### **Balance of Facilities (BOF)**

Procurement of the emergency diesel generator (EDG) remains the focus in BOF. A proposal has been received for the EDG, which is under review. ORP is also pursuing turbine generators, and discussions are under way with three potential suppliers. A decision on the path forward for the EDG will be made by the end of this month. Ecology noted the decline in the schedule performance index (SPI) for November/December 2010 and January 2011, and asked if BNI is ahead or behind schedule. ORP responded that BOF, Lab and LAW still have some schedule and cost that is being worked, and it is anticipated that the remainder of the year will be at or above one for cost and schedule.

### 3.0 Agreements

There were no agreements statused.

### 4.0 Items for the Administrative Record

There were no items for the AR.

### 5.0 Upcoming Meetings

The next PMM is scheduled for April 26, 2011. The Quarterly Milestone Review meeting is scheduled for May 19, 2011.

**Attachment A: Action Tracking** 

(3 pages including this cover sheet)

### ORP Action Items 3/22/2011 PMM

Open (O)/ Closed (X)	Action No.	8	Actionee	Project	Action Description	Date Opened	Status
0	100-167	ORP	W. Russell/ J. Lynch	General	Develop spreadsheet of document deliverables, scheduling tool of when due, status of Ecology review	3-23-10	3-22-11: Key document list updated and discussed at PMMs and Quarterly meetings.
0	100-176	ORP	C. Kemp	Tank Farms	Within 30 days after the CD is signed, set up a meeting to discuss the M-45-15A thru D and M-45-13A thru D milestone path forward.	4-27-10	1-24-11: Still in progress.
X	100-177	ORP	J. Long/ J. Johnson	Tank Farms	Provide Ecology with the WRPS evaluation report on S-102.	4-27-10	1-24-11: Closed Ecology will send a response closing this out.
0	100-178	ORP	J. Long	Tank Farms	Once the report from Action 100-177 is received, schedule a meeting with Ecology.	4-27-10	1-24-11: Can be closed and have one more Quarterly report.
0	100-189	ORP	C. Kemp	Tank Farms	Provide Ecology a briefing on the Critical Path for A-AX Farms	5-20-10	1-24-11: Need to agree on what CP is and move on.
0	100-190	ORP	T. Fletcher	Tank Farms	Provide an explanation to the Tribes of the process for the 242-A Evaporator Campaign and the MARS	5-20-10	1-24-11: Open; no new status.
0	100-202	ORP	R. Lober	Tank Farms	Schedule meeting with Ecology to discuss ongoing work in SX design	9-27-10	1-24-11: On-going meetings are being held.
0	100-204	ORP/ WRPS	C. Kemp/ J. Luke	Tank Farms	Provide hard heel dissolution DQO to Ecology.	9-27-10	1-24-11: Scheduled to start in February.

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Open (O)/ Closed (X)	Action No.	Co.	Actionee	Project	Action Description	Date Opened	Status
0	100-208	ORP	J. Diediker	Tank Farms	Provide Ecology the 222-S lab performance information. These will be tracked at the regular PMMs.	10-56-10	1-24-11: Not addressed.
0	100-212	ORP	C. Kemp	Tank Farms	Provide Ecology with a critical path schedule one level of detail below the M-045-61 milestone for WMA-C	12-28-10	1-24-11: CP discussion ongoing with Ecology.
×	100-213	ORP	C. Kemp	Tank Farms	Provide Ecology with ORP's proposed submittal date for the second RFI/CMS work plan.	12-28-10	1-24-11: Closed
×	100-214	ORP	C. Kemp	Tank Farms	Provide Ecology with ORP's proposed submittal date for the third RFI/CMS work plan.	12-28-10	1-24-11: Closed
0	100-215	ORP	C. Kemp	Tank Farms	Provide Ecology with ORP's critical path schedule for retrieval of the next WMA after C Farm	12-28-10	1-24-11: Need to finish depending on B2 tank discussions.
0	100-216	ORP	C. Kemp	Tank Farms	ORP will coordinate with WRPS on responding to AG comments on C Farm demo plan.	1-24-11	Open
0	100-217	ORP	J. Lynch	ORP	ORP needs to ensure the Key Document List Project Managers correctly reflect what is available on the TPA web page PM list.	1-24-11	3-22-11: Updated PM listings to reflect current POCs, online listing to be updated after RL inputs are incorporated by MSA by the end of March.
0	100-218	ORP	J. Trent	WTP	Provide Ecology with the name of the owner for M-062-49 by next month.	1-25-11	3-2-11: Closed Per email dated 3/1/2011

Attachment B: List of Attendees

(3 pages including this coversheet)

### ATTENDANCE LOG

DATE: \_March 22, 2011\_

PURPOSE: ORP Monthly Milestone Meeting

ORG.	PHONE #	
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	323-323	2>_3
ORP		
Eay	372-7988	
WRPS	539-5357	
WRPS	205-8269	
ORP/MSA	205-8457	
ORP	31643	
ORP	373-5227	
OPP	373-7849	
DOE-ORP	376-6200	
ORF	376-489 Z	
8/11	3751 - 1670	
wrp	436-0444	
WTP	205-7116	
WTP	376-5166	
Ecology	372-7931	
wfp 01	438-0455	
	ECY WRPS WRPS ORP/MSA ORP ORP ORP ORP ORP ORP WTP WTP WTP ECOLOGY	ODOE 373-3235  DRP 376-4170  Eay 373-7988  WRPS 539-5357  WRPS 205-8269  ORP/MSA 205-8457  ORP 373-5227  ORP 373-7849  DEC-ORP 376-7697  WTP 436-0444  WTP 376-5166  Ecology 372-7931

### ATTENDANCE LOG

DATE: \_March 22, 2011\_

PURPOSE: ORP Monthly Milestone Meeting

NAME	ORG.	PHONE #
Art Meva	DOE	376-6817
Reed Kaldor	MSA	372-1992
Lathy Higgins	DOE	376-3658
DAN KNICIACY	DOE	392-3069
Jane Diedeku	DOE	372-3043
Stere Pfaft	ORP	376 - 2188
Jeremy Johnson	ORP	376 /366
Jeff Lyon	ECY	539-1996
DAVID MEARS	ECY	372 - 7899
Robbie Biyani	•	
· Tray Gao	ECY	372-7901
Sonya Moore	MSA TIA	372-3320
MILLIE ARTZ	MSA	374-4188
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**Attachment C: Presentation Materials** 

ORP TPA Project Summary and Handouts (45 pages)

ORP Consent Decree Project Summary and Handouts (25 pages)

Working ORP Key Documents List
4 pages

(75 pages including this coversheet)

## Office of River Protection Tri-Party Agreement Project Summary Report March 22, 2011



### Office of River Protection Tri-Party Agreement Milestone Review Meeting March 22, 2011

Page	Topic	Leads	Time
TPA 1	Statistics / Status	Woody Russell / Dan McDonald / Jeff Lyon	9:00
7	M-45, -50, -60 Single-Shell Tank Corrective Action	Bob Lober / Joe Caggiano	9:05
9	M-45-00, Complete Closure of All Single-Shell Tank Farms - Tank in Appendix H Status - 242-A Evaporator Status	Chris Kemp / Jeff Lyon	9:15
19	M-45-91, SST Integrity Assurance	Jeremy Johnson/ Michelle Hendrickson	9:30
22	Interim Stabilization Consent Decree	Jeremy Johnson/ Nancy Uziemblo	9:35
23	In Tank Characterization and Summary	Jeremy Johnson / Michael Barnes	9:40
24	M-62-40, System Plan	Ron Koll / Dan McDonald	9:45
25	Tank Operations Contract (TOC) Overview	Kathy Higgins / Dan McDonald / Jeff Lyon	9:55
40	Complete Acquisition of New Facilities and Submit Part B Permit Applications - M-90-00 - M-47-00 - M-62-40	Janet Diediker / Steve Pfaff / Dan McDonald	10:00
42	WTP TPA Milestone Information	Wahed Abdul / Dan McDonald / Jeff Lyon	10:10
			10:20
4	SST Retrieval and Closure  - D-00B-01, -02, -03, -04  - TWRWP Status	Chris Kemp / Jeff Lyon	
7	WTP - Immobilization Plant Project M-62-20 - M-62-01U, -01V, M-062-49	Wahed Abdul /Jeff Trent / Gary Olsen/ Dan McDonald	10:25
11	WTP Pretreatment (PT) Facility	Wahed Abdul / Dan McDonald	10:35
14	High-Level Waste (HLW) Facility	Jeff Trent / Dan McDonald	10:45
17	Low-Activity Waste (LAW) Facility		10:55
20	Analytical Laboratory (LAB)	Gary Olsen / Dan McDonald	11:00
22	Balance of Facilities (BOF)	MICDOURIG	11:10
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Status
Milestone
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Date Completed	10/27/10	10/28/10	12/28/10	12/28/10	09/27/10	12/07/10	12/07/10
Due Date	10/31/10	10/31/10	12/28/10	12/28/10	12/29/10	12/31/10	12/31/10
Description	Select a Minimum of 3 scenarios	Quarterly Report	Submit to Ecology an Agreement Primary Document a Catch Tank "Assumed Leak" Response Plan.	Submit to Ecology as an Agreement Primary Document a Report on all Catch Tanks and Pipelines Used for SST Operations	Submit an Agreement Change Package with Interim Milestones to Implement the Panel's Recommendations M- 045-91	Complete Negotiations to Schedule Remaining 4 Additional Barriers	Meet Yearly on Performance of Barrier
Milestone No.	M-062-40A	D-001-00-R46	M-045-100	M-045-101	M-045-91A	M-045-92D	M-045-92E

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Fiscal Year 2011 Tri-Party Agreement Milestone Status	Date Completed	08/20/10	12/28/10	01/27/11	01/28/11	3/11/11			
Fisca	Due Date	12/31/10	01/31/11	01/31/11	01/31/11	03/31/11	04/30/11	06/30/11	06/30/11
	Description	Complete All 28 Issues in Independent WTP Flowsheet & Throughput Assessment	Complete those Portions of C-200 Closure Demonstration Plan Necessary to Complete Closure Plan Development for SST System	Submit Semi-Annual Project Compliance Report	Quarterly Report	M-045-91G-T05 Provide Report of the Visual Inspections of 12 SSTs in Table 3.3	Quarterly Report	Barrier 1 Design/Monitoring Approval from Ecology	Interim Completion of Tank S-102 SST Waste Retrieval and Closure Demonstration Project.
	Milestone No.	M-062-20	M-045-80	M-062-01V	D-001-00-R47	M-045-91G-T05	D-001-00-R48	M-045-92K	M-045-15

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Agr
Party Agr
Tri-Party Agr
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	On Schedule					×	×	×	×
	Date Completed								
	Due Date	06/30/11	06/30/11	06/30/11	06/30/11	07/25/11	07/31/11	07/31/11	07/31/11
	Description	Submit a Retrieval Data Report Pursuant to Agreement Appendix I	Remaining Wastes Adequately Characterized; Risk Assessment Completed for Residuals Remaining in the Tank	Update S-102 Component Closure Activity Plan	Exception to Waste Retrieval Criteria Pursuant to Agreement Appendix H	Submit to EPA & Ecology Lifecycle, Scope, Schedule & Cost for Hanford Site (RL is DOE Lead)	Quarterly Report	Ecology and DOE Agree to Meet, at a Minimum, Yearly (by July)	Submit Semi-Annual Project Compliance Report
	Milestone No.	M-045-15A	M-045-15B	M-045-15C	M-045-15D	M-036-01A	D-001-00-R49	M-045-56G	M-062-01W

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	Dispute Resolution				
	In Dispute Abeyance Resolution				
	In Program Planning				
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tus	To Be Missed Litigation Deleted				
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eement N	Recoverable				
rty Agr	At Risk				
1 Tri-Pa	On Schedule	×	×	×	×
Fiscal Year 2011 Tri-Party Agreement Milestone Status	Date On At Risk Recoverable Schedule				
Fiscal	Due Date	09/30/11	09/30/11	TBD [In accordance with M-045-84 or -85]	TBD [In accordance with M-045-84 or -85]
	Description	Implement DQO Process, Test Plan to Evaluate the Chemistries	M-045-91G-T01 Provide AOR Final Doc. For SSTs on 530,000 Gallon Tanks	Interim Completion of Tank S-112 SST Waste Retrieval and Closure	Complete Negotiations for Interim Milestones for Closure of S-112
	Milestone No.	M-045-91C	M-045-91G-T01	M-045-13	M-045-13E

	Dispute Resolution										
	In Abeyance										
	In Program Planning						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
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2012 Tri-Party Agreement Milestone Status	Recoverable										
ty Agr	At Risk										
: Tri-Par	On Schedule										
	Date Completed										
Fiscal Year	Due Date	10/25/11	10/31/11	10/31/11	12/30/11	12/31/11	01/31/12	01/31/12	01/31/12	03/31/12	03/31/12
	Description	Complete Negotiations Establishing Milestones for Near-Term Actions	Submit System Plan	Submit Report to Ecology Demonstrating WTP Design Meets Vit. Criteria	Submit a Sampling and Analysis Plan to Ecology	Meet Yearly on Performance of Barrier	Provide Report of Liner Failures for SSTs	M-045-91G-T02 Provide AOR Final Doc. For SSTs on 750,000 Gallon Tanks	Provide Report of the Liquid Leak Rate Assessments	Submit Analytical Test Plan for Cores Removed from C-107 Plug	Provide Report of the Visual Inspection of 12 SSTs per criteria in M-045-91G-T05
	Milestone No.	M-062-30	M-062-40B	M-062-49	M-045-91B	M-045-92F	M-045-91F-T02	M-045-91G-T02	M-045-91F-T01	M-045-91D	M-045-91G-T06

2012 Tri-Party Agreement Milestone Status	To Be Missed Litigation Deleted In Program Abeyance Resolution				
Agreement	Risk Recoverab				
: Tri-Party	On At Risk Recoverable				
Fiscal Year 2012	Date Completed				
Fiscal	Due Date	06/30/12	06/30/12	06/30/12	09/30/12
	Description	Barrier 1 Construction Complete	Barrier 2 Design/Monitoring Approval from Ecology	Complete Negotiation of No More Than 2 Interim Milestones	M-045-91G-T03 for SSTs on 1,000,000 Gallon Tanks
	Milestone No.	M-045-92L	M-045-92M	M-047-06	M-045-91G-T03

### WBS 5.2 Retrieve and Close Single Shell Tanks

M-045-58, Submit to Ecology for Review and Approval as an Agreement primary document, a phase 2 CMS Master Work Plan, Due: 12/31/08 Status: Complete.

Master Work Plan is in the Primary document revision process. ORP transmitted its response to Ecology on August 18, 2010. Ecology extended review of comment responses to October 29, 2010. Ecology requested at the October PMM a two week extension from October 27, 2010. ORP acknowledged that Ecology's comment response will be considered in abeyance until DOE-ORP, Ecology, and EPA complete their negotiation of the AIP applicable to Appendix I. Ecology assumed that negotiations would be done December 24, 2010. They have been extended.

M-045-60, Submit to Ecology for review and approval as an Agreement primary document DOE's Phase 2 RFI/CMS Work Plan and Sampling and Analysis Plan (SAP) for WMA C, Due: 12/31/08, Status: Complete.

ORP and Ecology continue to meet monthly to identify and manage changes in the workplan. Meetings were held January 27 and February 25, 2011. Meeting minutes for the November 17 session have been signed by the parties and have been entered into the TPA administrative record and applicable change requests.

M-045-56G, Complete Implementation of Agreed to Interim Measures, Due: 07/31/11, Status: On Schedule

M-045-92F, DOE and Ecology will meet yearly to review the monitoring data, agree to changes in monitoring (if needed) and assess the performance of the demonstration barrier, Due: 12/31/2011, Status: On Schedule

M-045-61, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 RFI/CMS Report for WMA C, Due: 12/31/14, Status: On Schedule

M-045-62, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 Corrective Measures Study Report for WMA C, Due: 06/30/2015, Status: On Schedule

M-045-92, DOE and Ecology will establish selection criteria for installation of additional interim barriers at additional WMAs (beyond the T-106 and TY barriers), Due: 9/30/2016, Status: On Schedule

M-045-59, Control surface water infiltration pathways as needed to control or significantly reduce the likelihood of migration of subsurface contamination to groundwater at the SST WMAS (pending the CMS report, milestone M-45-58, and implementation of other interim corrective measures), Due: TBD, Status: On Schedule

### **Significant Past Accomplishments:**

- T-Farm interim barrier monitoring continues.
- TY Interim Barrier Construction monitoring continues.

- Continued direct push characterization in C Farm at various planned locations
- Continued the joint process with Ecology and other regulatory agencies and stakeholders to define the inputs, approaches, assumptions and methods that will be used for development of a performance assessment for Waste Management Area C.
- Continued remediation technology assessments in support of a Corrective Measures Study for WMA C.
- Completed 3-D SGE data collection from western 241-BY farm, including depth electrodes placed by direct push.
- Continued design activities for a surface barrier in 241-SX farm.
- Continued direct push campaign in eastern BY farm, supporting Interim Barrier.
- Developed work plan for conducting 3-D SGE in eastern BY farm, supporting Interim
- Barrier.
- Continued the Data Quality Objective process for the Phase 2 RFI-CMS work plan for WMA A/AX.
- Continued reanalysis of well-to-well resistivity data from C Farm using recent advancements in codes and hardware.
- Completed 3-D SGE data collection over UPR-200-E-82 in C farm; 2-D lines remain to be collected; initiated analysis of 3-D data set.

### Significant Planned Actions in the Next Six Months:

- Continue direct push campaign in C Farm.
- Complete direct push campaign in Eastern BY Farm, supporting Interim Barrier Design and Placement.
- Initiate direct push campaign in S-Farm in support of a future interim barrier.
- Complete resistivity data analysis for western BY Farm, supporting interim barrier design.
- Initiate 3-D SGE data collection in eastern BY farm.
- Complete resistivity data collection for 3-D SGE characterization of UPR-82 in C Farm.
- Continue remediation technology assessments in support of a Corrective Measures Study for WMA C.
- Process the TPA change with the updates to the WMA C work plan.
- Perform additional updates to WMA C RFI/CMS workplan based on requested changes from Ecology.
- Complete design of interim surface barrier for SX farm.
- Complete the Data Quality Objective process for the Phase 2 RFI/CMS work plan for waste management area A/AX.

### Issues:

ORP would like to address Ecology's request for additional RFI/CMS milestones as part of the next tank farm closure discussions underway.

### **SST Retrieval and Closure Program**

M-045-82, Submit complete permit mod requests for Tiers 1, 2, & 3 of the SST, Due: 9/30/2015 Status: On Schedule

M-045-84, Complete negotiations of TPA interim MS for closure of second WMA, Due: 1/31/2017, Status: On Schedule

M-045-83, Complete the closure of WMA C, Due: 6/30/2019, Status: On Schedule

M-045-85, Complete negotiations of TPA interim MS for closure of remaining WMAs, Due: 1/31/2022, Status: On Schedule

M-045-70, Complete waste retrieval from all remaining SSTs, Due: 12/31/2040, Status: On Schedule

M-045-00, Complete Closure of all Single Shell Tank Farms, Due: 1/31/2043, Status: On Schedule

M-045-86, Submit retrieval data report to Ecology for 19 tanks retrieved, Due: TBD (12 months after retrieval certification), Status: On Schedule

### Significant Past Accomplishments:

None

### Significant Planned Activities in the Next Six Months:

See discussions above and related discussions in Consent Decree report.

### **Issues:**

- C-106 Closure Plan approval and SST radiological Categorical Notice of Construction (NOC) Phase 3 (closure) and a toxics categorical NOC application are pending completion of the Tank Closure and Waste Management Environmental Impact Statement (EIS) and associated Record of Decision (ROD); forecast completion for the final EIS is in the Winter of 2011.
- The Richland Office of USDOE has proposed an IS-1 alternate to the planned deliverable, as we understand the "IS-1 Common Vision" discussion on 1-18-11. IS-1 requires the delivery of an RFI/CMS that would include Tank Farm Pipelines. Ecology remains unclear on the objective of the USDOE Plans for IS-1 but must have this work plan to ensure that we can complete the SST Closure plan on schedule for the TPA milestones. This should be included in the critical path as well.

• USDOE is delaying the final numeric modeling supporting the WMA C performance assessment to align the timing with completion of the Tank Closure and Waste Management EIS. Impacts of this delay are being incorporated into the critical path schedules.

### Tank in Appendix H. Status - Single Shell Waste Retrieval Criteria

### **Tank 241-C-106**

### **Significant Past Accomplishments:**

None

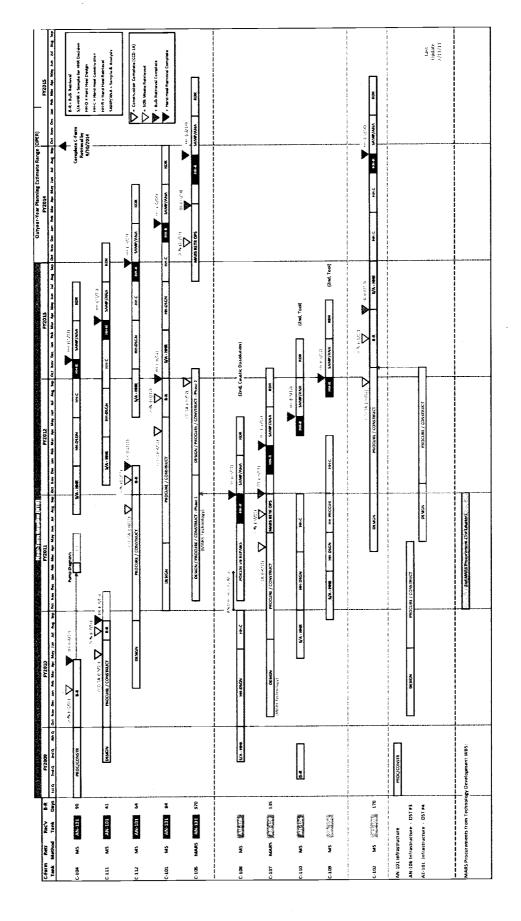
### Significant Planned Activities in the Next Six Months:

- Continue U.S. Nuclear Regulatory Commission (NRC) review of the C-106 exception request. A Request for Additional Information (RAI) was received from the NRC in February 2009. (It has been discussed with the NRC that much of the additional information requested is dependent upon development of C-Farm residual waste PA and, therefore, cannot be provided until the PA is published.)
- Continue PA workshops with Ecology, EPA, NRC, and DOE HQ focused on residual waste in C Farm tanks and pipelines following retrieval.
- ORP has requested an alternate milestone of the M-045-15, Tank 241-S-102 retrieval milestone.

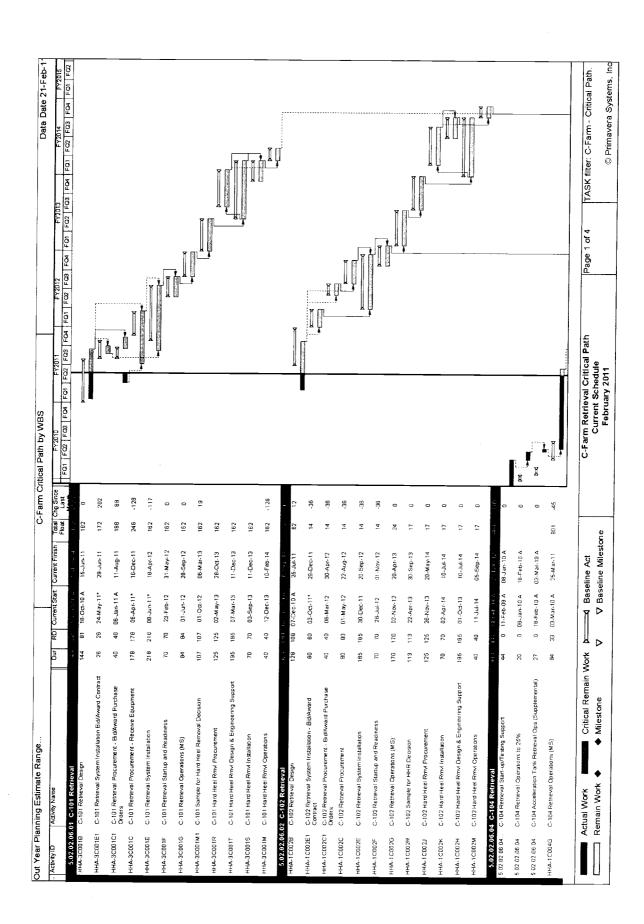
Issues:

## C-Farm Life Cycle Baseline 2014 Compliance Schedule

# C-Farm Retrieval Reflects Baseline as of 2/11/11 (Includes BCR-132 and BCR-121)



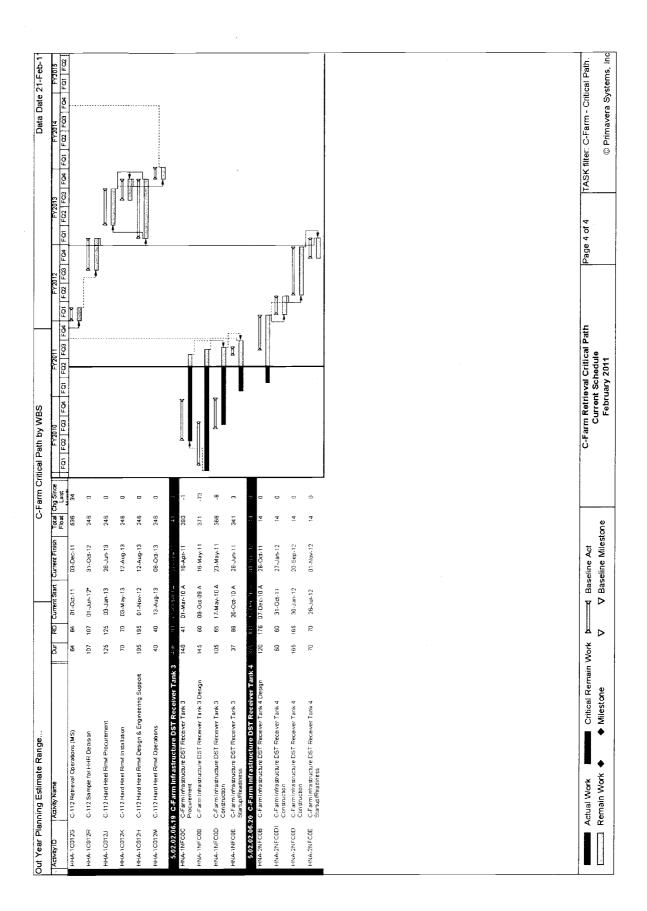
March 2011



March 2011

Project Manager TPA Review

March 2011



## Tank Retrievals with Individual Milestones

#### Tank 241-S-102

M-045-15, Interim Completion of Tank S-102 SST Waste Retrieval and Closure Demonstration Project, Due: 6/30/11 Status: At Risk. See discussion below under "Issues". Change Request M-45-07-01 approved by DOE and Ecology on December 4, 2007.

M-045-15A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I, Due: 6/30/11, Status: At risk. See discussion below under "Issues".

M-045-15B, Embedded Milestone, Remaining Wastes have been adequately Characterized, and a Risk Assessment has been completed for residuals that remain in the tank, Due: 6/30/11, Status: At risk. See discussion below under "Issues".

M-045-15C, Embedded Milestone, An update to the S-102 Component Closure Activity Plan has been submitted by DOE, Due: 6/30/11, Status: At risk. See discussion below under "Issues".

M-045-15D, Embedded Milestone, if appropriate, DOE has requested an exception to waste retrieval criteria pursuant to Agreement Appendix H, Due: 6/30/11, Status: At risk.

Significant Past Accomplishments:

None

Significant Planned Activities in the Next Six Months:

None

#### Issues:

- Tank S-102 retrieval by June 30, 2011 is at risk. It is technically imprudent to attempt to accelerate retrieval of S-102, at this time, because of the rheological nature of the waste.
- In a letter dated August 15, 2006, Ecology stated that submittal of Component Closure Activity Plans, for retrieved tanks, should continue to be suspended until June 30, 2009, or within 120 days after the Final Tank Closure and Waste Management Environmental Impact Statement (TC&WM EIS) Record of Decision (ROD) is issued, whichever is earlier. In a letter dated November 12, 2009, Ecology extended its suspension until 180 days after the issuance of the final TC&WM EIS. It is anticipated that the final TC&WM EIS will not be issued until the winter of 2011-2012. Submittal of the Closure Plan could not occur, then, until several months after the M-45-15 milestone is due.

#### Tank 241-S-112

M-045-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project, Due: TBD (in accordance with M-045-84 or M-045-85), Status: On Schedule

M-045-13E, Complete Negotiations for Interim Milestones for Closure of S-112, Due: TBD Status: On Schedule as part of M-045-84 and M-045-85.

#### **Significant Past Accomplishments:**

• Ecology letter of January 7, 2008, concurred with ORP that retrieval of Tank S-112 is complete.

Significant Planned Activities in the Next Six Months:	
None	
Issues:	
None	

# **Complete Closure of Double Shell Tanks**

M-042-00A, Complete closure of all double shell tank farms, Due: TBD, based upon completion of retrieval under M-62-45 plus 5 yrs but no later than 9/30/2052 Status: On Schedule

Significant Past Accomplishment	Significant	<b>Past</b>	Accom	plishment	ts:
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None

Significant Planned Actions in the Next Six Months:

None

**Issues:** 

# 242-A Evaporator Status (previously reported under Milestone M-48, which has been closed out)

#### 242-A Campaign strategy:

One (1) cold run (utilizing water only) and two (2) waste processing campaigns were completed in FY2010. No additional campaigns are anticipated in CY2011 due to ongoing 242-A and Tank Farm Life Extension and ARRA funded facility upgrades. The 242-A Campaign Strategy for FY2010 through FY2015 depicted below has been updated based on ORP-11242, River Protection Project Plan, Revision 5, and ongoing schedule integration efforts.

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments				
FY10	10-01	AW-106	AW-106	Campaigns 10-01/10-02 were performed back-to back starting in late August and				
FY10	10-02	AW-106	AW-106	completing in early October 2010. Campaign 10-02 was an acceleration of previously planned Campaign 11-01.				
FY11	FY11 NA NA NA			No campaign planned in FY11 due to ongoing 242-A and Tank Farm facility life extension and ARRA funded upgrades.				
FY12	FY12 12-01 AP-107 AP-104 AP-107			Estimated start June 2012. Anticipates blending AZ-102 high cesium concentration with AP-107 waste. May require two (2) passes to achieve waste volume reduction.				
FY12	Y12 12-02 AP-107 AZ-102 AP		AP-107	Estimated start August 2012. Anticipates blending AZ-102 high cesium concentration with AP-107 waste. May require two (2) passes to achieve waste volume reduction.				
FY13	13-01	AW-106	AP-107	Estimated start March 2013. Two (2) passes required.				
FY13	FY13 13-02 AZ-101 AN-101 AW-106		AP-107	Estimated start September 2013. Two (2) passes required.				
FY14	EV14 AN-106		AP-107	Estimated start March 2014. Two (2) passes required.				
FY15	715 15-01 AY-101 AP-107 AP-107		AP-107	Estimated start March 2015. Three (3) passes required.				
FY15	15-02	AY-101	AP-107	Estimated start August 2015. Four (4) passes required.				

# **SST Integrity Assurance**

M-045-91G-T05, Provide to Ecology a report documenting and evaluating the visual inspection of 12 SSTs per the criteria listed in Table 3.3 in RPP-PLAN-46847, Rev.0, Due: 3/31/2011, Status: Complete 03/11/11 (11-TF-039)

M-045-91C, implement the DQO process to develop and provide Ecology a Test Plan to evaluate the chemistries as specified in RPP-RPT-43 116. Rev 0, Due: 9/30/2011, Status: On Schedule

M-045-91G-T01, Provide to Ecology the Structural Analyses of Record final documentation for SSTs for 530, 000 gallon tanks (B, BX. C, T and U Farms), Due: 9/30/2011, Status: On Schedule

M-045-91B, Submit a Sampling and Analysis Plan to Ecology for the sampling of sidewall cores from tank 241-A-106 or alternate tank approved by Ecology, Due: 12/30/2011, Status: On Schedule

M-045-91F-T01, Provide to Ecology as a HFFACO secondary document a report evaluating the applicability to Hanford SSTs of the liquid leak rate assessments of sludge and salt-cake from the Savannah River Site, Due: 1/31/2012, Status: On Schedule

M-045-91F-T02, Provide to Ecology as a HFFACO secondary document a report evaluating the common factors of liner failures for SSTs that have leaked and will provide recommendations as appropriate, such as enhanced Leak Detection, Monitoring, and Mitigation, Due: 1/31/2012, Status: On Schedule

M-045-91G-T02, provide to Ecology the Structural Analyses of Record final documentation for SSTs for 750,000 gallon tanks (BY, S, TX and TY Farms), Due: 1/31/2012, Status: On Schedule

M-045-91D, Submit to Ecology an analytical test plan for the cores removed from the C-107 plug, Due: 3/31/2012, Status: On Schedule

M-045-91G-T06, Provide to Ecology a report documenting and evaluating the visual inspection of 12 SSTs per the criteria in M-045-91G-T05, Due: 3/31/2012, Status: On Schedule

M-045-91G-T03, Provide to Ecology the Structural Analyses of Record final documentation for SSTs for 1,000,000 gallon tanks (A, AX and SX Farms), Due: 9/30/2012, Status: On Schedule

M-045-91D-T01, Provide Ecology a report containing the results and interpretation of testing, and analysis performed on the concrete dome samples obtained from the Tank C-107 plug, Due: 5/31/2013, Status: On Schedule

M-045-91F-T03, Provide to Ecology, as a HFFACO secondary document a report assessing the feasibility of testing for ionic conductivity between the inside and outside of SSTs, Due: 5/31/2013, Status: On Schedule

M-045-91F-T04, provide to Ecology, as a HFFACO secondary document, a report on the 100-series single-shell tanks which have been or will be identified as having leaked in RPP-32681, Rev 0, Due: 7/31/2013, Status: On Schedule. Ecology and ORP are jointly drafting a Class III Change Request, M-45-11-01, aligning the completion dates of this milestone and M-045-91F-T02 ("Common Factors of Liner Failures for SSTs" report) to ensure all of this milestone's leak evaluations will be available for use in the Common Factors report.

M-045-91E, Provide to Ecology a compilation of the Single-Shell Tank farms dome deflection surveys every two years, beginning 9/30/2013, Due: 9/30/2013, Status: On Schedule

M-045-91G-T04, provide to Ecology the Structural Analyses of Record final documentation for SSTs for 55,000 gallon tanks (B, C, T and U Farms), Due: 10/31/2013, Status: On Schedule

M-045-91F, Provide to Ecology a report (Summary Conclusions Report on Leak Integrity) summarizing and evaluating the information submitted under M-045-91F-T01 through - T04, Due: 12/31/2013, Status: On Schedule

M-045-91G, Provide a Summary Conclusions Report of Structural Analysis of Record (AOR) for SSTs, Due: 4/30/2014, Status: On Schedule

M-045-91B-T01, Provide Ecology a report containing the results and interpretation of testing. and analysis, performed on the concrete core obtained from Tank A- 106 or alternate tank, Due: 9/30/2014, Status: On Schedule

M-045-91H, Submit a change package (if deemed necessary by DOE and Ecology) to establish additional milestones based on information obtained from the actions in the preceding M-045-91 series milestones to date, Due: 7/31/2015, Status: On Schedule

M-045-91I, Provide to Ecology an IQRPE certification of SSTs structural integrity for the remainder of the mission, or for such time as the IQRPE believes he/she can reasonably certify, Due: 9/30/2018, Status: On Schedule

**Significant Past Accomplishments:** 

# **Significant Planned Actions in the Next Six Months:**

- M-045-91B: Begin DQO sessions for side-wall coring. First meeting scheduled for 2/08/11.
- M-045-91C: Begin developing a Test Plan to investigate chemistries as specified in RPP-43116.
- M-045-91D: Begin analytical test plan development for Tank C-107 dome core analyses efforts.
- M-045-91G-T05: Submit Visual Inspection Report for 12 SST's completed during FY 2010.

#### **Issues:**

## **Interim Stabilization Consent Decree**

#### I. Near-Term Deliverables:

#### D-001-00, Complete Interim Stabilization of all 29 SSTs

Due: 09/30/04

Status: Completed on March 31, 2004, with discontinuation of pumping in U-108 and subsequent consultation with Ecology staff. Interim stabilization of S-102 and S-112 is held in abeyance by third amendment to the Consent Decree. ORP's obligation to interim stabilize S-112 was satisfied upon completion of retrieval operations. Retrieval of S-102 has been impacted by the spill at this tank. A review of the January 25, 2010, video of the tank has shown approximately 2,400 gallons of supernatant liquid remaining. This is below the criteria for interim stabilization of less than 5000 gallons supernatant liquid.

On October 21, 2010, ORP received a letter from Ecology notifying ORP of Ecology's decision to require ORP to Interim Stabilize tank 241-S-102 within 18 months of receipt of its notification. ORP transmitted the required documentation to Ecology to demonstrate that tank 241-S-102 meets the requirements for interim stabilization, as set forth in Case Number CT-99-5076, Third Amendment on December 9, 2010 via letter 10-TPD-163.

#### II. Significant Accomplishments:

- Quarterly report for 1<sup>st</sup> quarter FY11 transmitted to Ecology on 1/31/11 under letter 11-TPD-009.
- Formal documentation for completion of S-102 interim stabilization submitted to Ecology 12/9/10
- Documentation for completion was signed by courts for closure on 03/08/2011. This closes out the D-001-00 milestone series.

#### III. Significant Planned Actions in the Next 6 Months:

None

#### IV. Issues

# In Tank Characterization and Summary

For the period from February 1 – February 28, 2011:

#### • Accomplishments:

- Completed Revision 0 of the TSAP RPP-PLAN-48557, Sampling and Analysis Plan for Hard Heel Solids in Tank 241-C-104 After Sluicing, on February 15, 2011.
- Completed Revision 0 of the TSAP RPP-PLAN-48706, *Tank Sampling and Analysis Plan for 241-AP-105 2011 Grab Samples*, on February 17, 2011.
- Completed Revision 0 of the DQO RPP-48188, *C-108 Hard Heel Dissolution Data Quality Objectives* on February 9, 2011.
- Completed Revision 4 of RPP-RPT-44814, *Derivation of Best-Basis Inventory for Tank* 241-AN-101, on February 22, 2011.
- Completed Revision 0 of RPP-RPT-48639, Derivation of Best-Basis Inventory for Tank 241-AP-104, on February 25, 2011.
- Completed Revision 6 of RPP-RPT-43979, Derivation of Best-Basis Inventory for Tank 241-AY-101, on February 16, 2011.
- Completed Revision 1 of RPP-RPT-44630, *Derivation of Best-Basis Inventory for Tank 241-AY-102*, on February 15, 2011.
- Completed Revision 0 of RPP-RPT-48774, Derivation of Best-Basis Inventory for Tank 241-SY-101, on February 25, 2011.

#### • Planned Action within the next Six Months:

- Tank Sampling
  - Tank 241-C-109 off riser sampling scheduled for March 2011.
  - Tank 241-AY-101 corrosion mitigation grab samples scheduled for March 2011.
  - Tank 241-AP-105 corrosion mitigation grab samples scheduled for March 2011.
  - Tank 241-C-104 off riser sampling scheduled for June 2011.
  - Tank 241-AW-106 evaporator sample scheduled for June 2011.
  - Tank 241-C-108 hard heel dissolution samples scheduled for August 2011.

#### BBI Updates

- Seven tank updates were planned for FY11 Quarter 2. Five updates have been completed and sent to BBI users.
- Data Quality Objectives (DQO)
  - Complete Revision 18 of the Compatibility DQO in March 2011.
  - Complete Revision 3 of the PCB Management DQO in May 2011.
  - Complete Revision 0 of the 244-CR Vault tanks in April 2011.

#### • Issues:

# System Plan

M-062-40B, Submit a system plan describing the disposition of all tank waste managed by ORP, Due: 10/31/2011, Status: On Schedule

M-062-40C, Select a minimum of three scenarios that will be analyzed in the system plan, Due: 10/31/2013, Status: On Schedule

M-062-40D, Submit a system plan describing the disposition of all tank waste managed by ORP, Due: 10/31/2014, Status: On Schedule

M-062-40ZZ, Submit a one-time Tank Waste Supplemental Treatment Technologies report if a supplemental treatment technology is proposed other than a 2nd LAW, Due: 10/31/2014, Status: On Schedule.

M-062-45-T01, Every six years, within six-months after last revision of the System Plan, negotiate tank waste retrieval sequencing, Due: 4/30/2015, Status: On Schedule

#### Significant Past Accomplishments:

The Key Assumptions and Success Criteria for RPP System Plan Revision 6 were approved on 2/1/11. The System Plan Annotated Outline was reviewed and comments were incorporated during January. A large amount of HTWOS modeling was completed in January, constructing building blocks for the 10 scenarios.

# Significant Planned Actions in the Next Six Months:

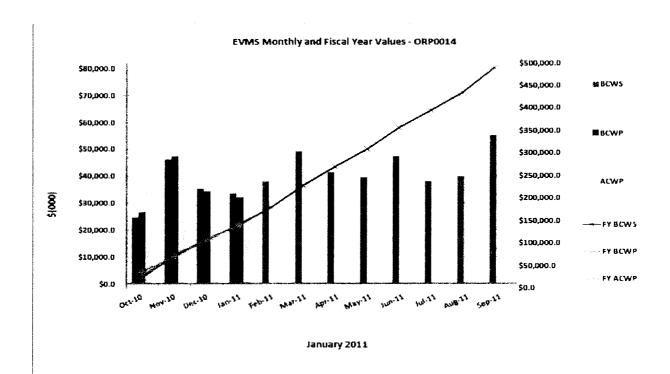
Work on System Plan Rev. 6 supporting M-062-40B during the next six months will include the following activities: Prepare model modification requests, complete HTWOS modeling, V&V and data analysis and perform periodic reviews with ORP and Ecology. The first version of the Baseline Scenario is planned to be completed in February, prior to adjustments for budget constraints.

I	S	S	u	e	S	:

None.

# TANK OPERATIONS CONTRACT (TOC) OVERVIEW

# Office River Protection - Tank Farm - Fiscal Year To-Date Performance



Earned Value				1						
Month	8CWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-10	\$24,918.8	\$26,782.0	\$37,083.6	1.07	0.72	\$24,918.8	\$26,782.0	\$37,083.6	1.07	0.72
Nov-10	\$46,528.0	\$47,510.9	\$34,301.0	1.02	1.39	\$71,446.8	\$74,292.9	\$71,384.5	1.04	1.04
Dec-10	\$35,469.5	\$34,558.3	\$35,056.5	0.97	0.99	\$106,916.3	\$108,851.1	\$106,441.0	1.02	1.02
Jan-11	\$33,862.5	\$32,115.2	\$33,376.8	0.95	0.96	\$140,778.8	\$140,966.4	\$139,817.8	1.01	1.00
feb-11	\$38,205.9	ļ				\$178,984.7				
Mar-11	\$49,22G.4					\$228,211.1				Ī
Apr-11	\$41,597.9					\$269,809.0				
May-11	\$39,608.3					\$309,417.3				
Jun-11	\$47,399.0					\$356,816.3				
Jul-11	\$38,211.4					\$395,027.7				
Aug-11	\$39,949.9					\$434,977.6	•			
Sep-11	\$55,491.8					\$490,469.4				

CTD	\$900,834.5	\$894,200.0	\$831,940.8	0.99	1.07

The unfavorable current month (CM) schedule variance (SV) of (\$1,747k) is driven by the following projects:

#### CLIN 1 - Base Operation, \$(1,507k)

- 222-S Lab Reliability Upgrades for room and waste renovations
- 222-S Lab Mobile Office replacement

#### CLIN 2 - Retrieval and Closure SSTs, (\$490k)

- Design delays for the AW Trailer Complex Mobile Office
- Tank AN-107 ultrasonic examination due to resources
- SX Farm Infrastructure Sludge Cooler Removal Project

The unfavorable current month (CM) cost variance (CV) of (\$1,262k) is driven by the following projects:

#### **CLIN 1 - Base Operations**

- 222-S Lab upgrades for hardware/software procurement
- 242-A Evaporator Exhauster Upgrades on skid fabrication and installation design

#### CLIN 2 - Retrieval and Closure SST's

- C-107 Retrieval for the Mobile Are Retrieval System (MARS)
- C-104 Retrieval for the Operational Acceptance Testing and resolution of Slurry Pump issues
- The Articulating Mast System modifications and testing

The unfavorable contract to date (CTD) schedule variance (SV) of (\$6,634k) is driven by the following projects:

#### CLIN 1 - Base Operations, (\$1,206k)

- Design delays for the Core Sampling Truck Replacement
- 222-S Facility Reliability deferrals
- Design delays of the AZ Condensate Line Upgrade
- Design delays of jumper fabrication and line installation
- Design delays for the AW Trailer Complex
- Remove Obsolete Equipment delays

#### CLIN 2 - Retrieval and Closure SST's, (\$4,783k)

- C-108 Retrieval due to delays in hard heel removal
- C-104 Retrieval pumping delays due to obstruction
- SX Farm Infrastructure Sludge Cooler Removal

The favorable contract to date (CTD) cost variance (CV) of \$62,259 is due to the following projects:

#### CLIN 1 - Base Operations, \$30,068

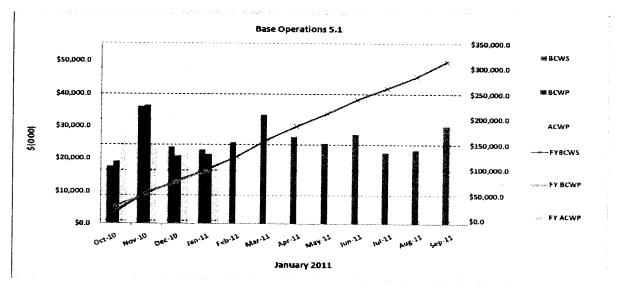
- Facility and Property Management FY09 unfilled positions and slow ramp-up
- 222-S Roof Replacement costs less than originally planned
- Information Resource Management costs due to lower material expenditures as the result of receiving items from Yucca Mountain at a savings
- DST Integrity Project due to cost efficiencies on encasement pressure checks and labor efficiencies during AW-101, AW-104, AW-105 and AW-106 UT examinations
- Fabrication of jumpers for AP, AN-1 and AN-B Valve pits savings

#### CLIN 2 - Retrieval and Closure, \$9,698

- Hose in Hose Transfer Line disposition efficiencies
- C-110 Retrieval and Catch Tank Reporting efficiencies
- Catch Tank & Pipeline Reporting due to efficiencies gained by using direct labor rather than contract labor

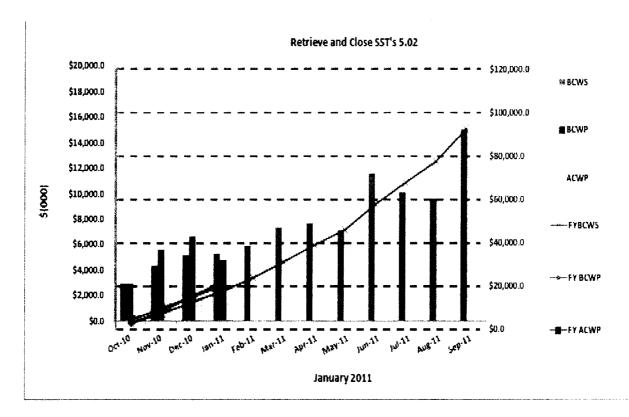
#### WFD/Treatment PLNG/DST Retrieval/Closure, \$21,964k

- Wiped Film Evaporator decreased procurement cost savings
- Waste Feed Delivery flow sheet due to lack of contract support and hiring delays
- AW Cob Isolation efficiencies gained by awarding to an experienced contractor and requiring fewer resources than planned



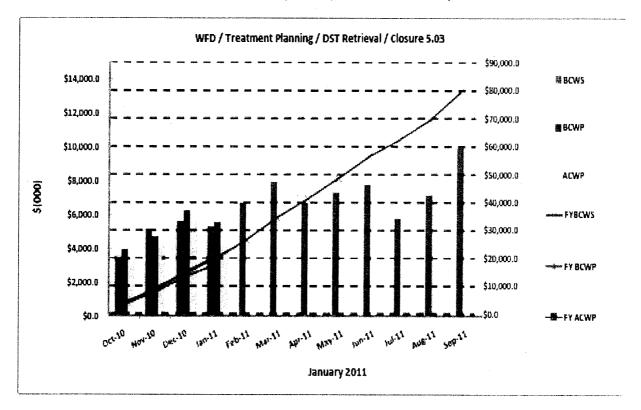
Earned Value										
Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FYACWP	FY SPI	FY CPI
Oct-10	\$17,777.2	\$19,285.1	\$28,549.6	1.08	0.68	\$17,777.2	\$19,285.1	\$28,549.6	1.08	0.68
Nov-10	\$36,143.1	\$36,366.3	\$24,452.2	1.01	1.49	\$53,920.3	\$55,651.4	\$53,001.8	1.03	1.05
Dec-10	\$23,775.6	\$20,995.7	\$23,448.8	0.88	0.90	\$77,695.9	\$76,647.1	\$76,450.6	0.99	1.00
Jan-11	\$22,876.6	\$21,370.0	\$21,705.1	0.93	0.98	\$100,572.5	598,017.1	\$98,155.7	0.97	1.00
Feb-11	\$25,286.0	T -			1	\$125,858,5				
Mar-11	\$33,598.6					\$159,457.1				
Apr-11	\$26,943.0				<b>†</b>	\$186,400.1		-		<b></b>
May-11	\$24,939.1					\$211,339.2				
Jun-11	\$27,677.6					\$239,016.8				-
Jul-11	\$22,034.5					\$261,051.3	-			
Aug-11	\$22,915.8					\$283,967.1				
Sep-11	\$30,161.4					\$314,128.5	_		-	

CTD	\$613,556,4	\$612,350.4	\$582.282.2	1.00	1.05

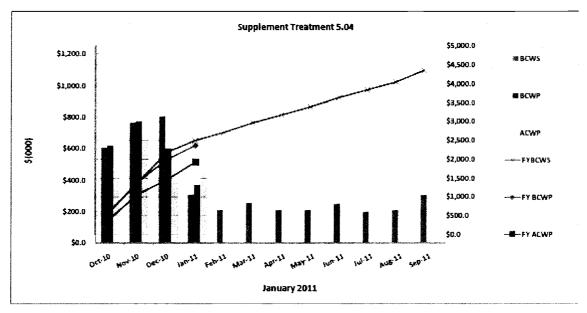


Earned Value										
Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CP
Oct-10	\$2,991.6	\$2,932.6	\$4,707.6	0.98	0.62	\$2,991.6	\$2,932.6	\$4,707.6	0.98	0.62
Nov-10	\$4,412.7	\$5,622.7	\$5,006.7	1.27	1.12	\$7,404.3	\$8,555.3	\$9,714.3	1.16	0.88
Dec-10	\$5,209.7	\$6,682.7	\$5,494.0	1.28	1.22	\$12,614.0	\$15,238.0	\$15,208.3	1.21	1.00
Jan-11	\$5,310.0	\$4,820.2	\$6,975.6	0.91	0.69	\$17,924.0	\$20,058.2	\$22,183.9	1.12	0.90
Feb-11	\$5,945.4					\$23,869.4				
Mar-11	\$7,380.0					\$31,249.4				
Apr-11	\$7,707.4					\$38,956.8				
May-11	\$7,118.9					\$46,075.7				
Jun-11	\$11,634.4					\$57,710.1				
Jul-11	\$10,142.4					\$67,852.5				
Aug-11	\$9,598.5					\$77,451.0				
Sep-11	\$15,039.3					\$92,490.3				

CTD	\$179,194.0	\$174,411.4	\$164,713.1	0.97	1.06



Earned Value								]		
Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-10	\$3,540.0	\$3,944.3	\$3,413.8	1.11	1.16	\$3,540.0	\$3,944.3	\$3,413.8	1.11	1.16
Nov-10	\$5,203.6	\$4,748.8	\$4,184.7	0.91	1.13	\$8,743.6	\$8,693.1	\$7,598.5	0.99	1.14
Dec-10	\$5,677.1	\$6,277.7	\$5,689.4	1.11	1.10	\$14,420.7	\$14,970.8	\$13,287.9	1.04	1.13
Jan-11	\$5,366.1	\$5,557.1	\$4,225.6	1.04	1.32	\$19,786.8	\$20,527.9	\$17,513.5	1.04	1.17
Feb-11	\$6,762.3					\$26,549.1				
Mar-11	\$7,991.8					\$34,540.9				
Apr-11	\$6,736.5					\$41,277.4				
May-11	\$7,339.8					\$48,617.2				
f1-nut	\$7,834.4					\$56,451.6				
Jul-11	\$5,834.4					\$62,286.0				
Aug-11	\$7,225.0					\$69,511.0				
Sep-11	\$9,985.9					\$79,496.9				



Earned Value										
Month	BCWS	BCWP	ACWP	SPE	CPI	FYBCWS	FY BCWP	FYACWP	FY SPI	FY CPI
Oct-10	\$610.0	\$619.9	\$412.6	1.02	1.50	\$610.0	\$619.9	\$412.6	1.02	1.50
Nov-10	\$768.6	\$773.1	\$657.3	1.01	1.18	\$1,378.6	\$1,393.0	\$1,069.9	1.01	1.30
Det:-10	\$807.0	\$602.2	\$384.2	0.75	1.57	\$2,185.6	\$1,995.2	\$1,454.1	0.91	1.37
Jan-11	\$309.8	\$368.0	\$470.6	1.19	0.78	\$2,495.4	\$2,363.2	\$1,924.7	0.95	1.23
Feb-11	\$212.2					\$2,707.6				
Mar-11	\$256.1					\$2,963.7				
Apr-11	\$211.1					\$3,174.8				
May-11	\$210.5					\$3,385.3				
Jun-11	\$252.6					\$3,637.9				
Jul-11	\$200.0					\$3,837.9				
Aug-11	\$210.5					\$4,048.4				
Sep-11	\$305.2					\$4,353.6				

cro	\$5,387.0	\$5,254.7	\$4,725.8	0.98	1.11

# Complete Acquisition of New Facilities and Submit Part B Permit Applications

M-090-11, Complete the Negotiation of No More Than Two Canister Storage Facility Construction Interim Milestones, Due: 12/31/12, Status: On Schedule. Negotiations are not yet underway.

M-090-00, Acquire/modify facilities for storage of IHLW, Due: 12/31/2019, Status: On Schedule

M-047-06, Complete negotiation of no more than two interim milestones governing work necessary to support completion of M-045-00, Due: 06/30/12, Status: Negotiations are not yet underway.

M-047-00, Complete Work Necessary to provide facilities for management of secondary waste from the WTP, Due: 12/31/2022, Status: On Schedule

M-062-30, Complete negotiations establishing milestones for near term actions, Due: 10/25/11, Status: On schedule. Negotiations are not yet underway.

M-062-45ZZ, Negotiate a one-time supplemental treatment selection, Due: 4/30/2015, Status: On schedule. Negotiations are not yet underway.

**M-062-45ZZ-A, Convert M-062-31-T01 through M-062-34-T01 to Interim Milestones**, Due: 4/30/2015, Status: On Schedule.

M-062-31-T01, Complete final design and submit RCRA Part B permit mod request, Due: 4/30/2016, Status: On schedule

M-062-32-T01, Start construction of supplemental vitrification treatment facility and/or WTP enhancements, Due: 4/30/2018, Status: On schedule

M-062-33-T01, Complete construction of supplemental vitrification treatment facility and/or WTP enhancements, Due: 4/30/2021, Status: On schedule

M-062-45XX, No later than 12/31/2021, the DOE and Ecology shall complete negotiations to establish a mechanism that will apply to resolve future disputes regarding the determinations in M-062-45, paragraphs 4 and 5, due: 12/31/2021, Status: On Schedule

M-062-34-T01, Complete hot commissioning of supplemental vitrification treatment facility and/or WTP enhancements, Due: 12/30/2022, Status: On schedule

M-062-21, Annually, submit data that demonstrates operation of the WTP, Due: 2/28/2023, Status: On Schedule

M-062-00, Complete Pretreatment Processing and Vitrification of HLW and LAW Tank Wastes, Due: 12/31/2047, Status: On Schedule

#### **Significant Past Accomplishments:**

None

#### **Significant Planned Actions in the Next Six Months:**

Initiate negotiations under M-062-30.

#### **Issues:**

ORP received Letter 1100295 from Ecology on 1/13/11 stating Ecology has "...formed the opinion that USDOE actions jeopardize completion of HFFACO Milestone M-062-30."

# Hanford Waste Treatment and Immobilization Plant (WTP) Project

M-062-01W, Submit Semi-Annual Project Compliance Report, Due: 7/31/2011, Status: On Schedule

M-062-49, Submit a report to Ecology demonstrating that the WTP is designed to accomplish, pretreat 100% of retrievable waste, vitrify 100% of separated hi level waste, WTP LAW with Supplemental treatment can vitrify 100% of separated low level waste stream, Due: 10/31/2011, Status: On Schedule

There are about 3,200 FTE equivalent contractor [Bechtel National Inc. (BNI)] and subcontractor personnel working on the WTP Project, including 1,060 craft, 540 non-manual, and about 195 subcontractor personnel FTE equivalents working at the WTP construction site (all facilities). Overall project percent complete through January 2011 is 57%, design and engineering is 79% complete, procurement is 60% complete and construction is 54% complete.

In January 2011, the facility percent complete values for Design/Engineering decreased. This decrease in values was tied to the incorporation of the BNI Forecast Update Four EAC. This resulted in an increase in the facility engineering budget, which has correspondingly reduced the to-date percent complete values.

The overall WTP Project Schedule Variance (SV) in December was a positive \$1.8M, the Cost Variance (CV) was a positive (\$6.4M). Both the positive cost and schedule variances came primarily from the Construction and Plant Equipment control accounts.

Following is the status through the end of January for current project issues:

#### **Significant Past Accomplishments:**

- Revised Project Execution Plan sent to HQ first week of March
- BNI & WRPS working to submit and integrated management/technical proposal for a one system approach to meet the "2020 vision for the WTP Project Transition to Operations"
- BNI completed the HLW Civil, Structural, and Architectural Title II Design Complete Contract Milestone on February 17, 2011
- Low Order Accumulation Model (LOAM) benchmarking tsts for Non-Newtonian vessel configuration are complete.

#### **Significant Planned Actions in the Next Six Months:**

- There will be a mini Construction Project Review in March 2011
- A full Construction Project Review is scheduled for May 2011
- Complete analytical results from the Low Order Accumulation Model (LOAM) validation testing for the non-Newtonian vessel configuration

- Erection of PT 4<sup>th</sup> tier structural steel (77ft to 98ft elevation)
- Commence Siding and Roofing of HLW Annex
- Complete vendor fabrication of the LAW Carbon Bed Adsorber (CBA
- Complete the BOF water treatment facility

#### **Issues:**

No significant issues at this time.

# Pretreatment (PT) Facility

#### **Significant Past Accomplishments:**

The Pretreatment Facility (PT) will separate radioactive tank waste into High Level Waste (HLW) and Low-Activity Waste (LAW) fractions and transfer each waste type to the respective vitrification facility for immobilization. Overall facility percent complete is 47%, engineering is 76% complete, procurement is 43% complete, and construction is 34% complete.

Overall construction continues to perform well. Rebar and embed installation and fabrication of rebar wall curtains continues to support additional slab and wall placements at the 77ft and 98ft elevation. Construction completions for the month of February include: placement of two 5<sup>th</sup> lift (77ft to 9-ft elevation) walls (5-25 and 5-31, ~160 CY), prefabrication of rebar curtains for three walls, installation of two Plant Wash and Disposal vessels, and fabrication and delivery of pipe spools in the hot cell.

On-going work includes: erection on the 4<sup>th</sup> tier structural steel on the northwest corner of the 77ft elevation, fireproofing, drain and process piping, cable trays and supports, and HVAC ductwork.

Engineering continues to implement changes from the technical issue resolutions into the P&ID drawings and other design documents. In February, PT engineering issued the Cesium Ion Exchange (CXP) system electrical wiring diagrams for construction, and issued the electrical grounding layout drawings for the 28ft elevation. In addition, one hundred and thirty electrical circuits were designed and eighty four electrical circuits were routed.

Material requisitions for quote on floor penetration offset assembly modules, plant wash and fluidic racks, and two safety flush vessels are issued.

# Significant Planned Actions in the Next Six Months:

- Complete analytical results from the Low Order Accumulation Model (LOAM) validation testing for the non-Newtonian vessel configuration
- Complete planning for the Large Scale testing for the validation of vessel mixing Scale-up
- Issue the revised design option and P&ID's for the Process Vessel Vent System (PVV) and the Pretreatment Vessel Vent Process (PVP) system
- Complete the coupled dynamic analysis for the Waste Feed (FEP) and Treated Law (TLP) evaporators
- Complete fabrication of two major Jumper frames
- Complete placement of 1 slab, 2 basements, and 26 walls, totaling about ~6,200 CY
- Erection of 4<sup>th</sup> tier structural steel (77ft to 98ft elevation)
- Release four Solenoid Valve Utility Racks to Fabrication
- Fabricate and deliver 38 pipe spools, and begin fabrication on an additional 28 pipe spools.

#### **Issues:**

The PT vessel vent process (PVP) and vessel vent exhaust (PVV) systems are being upgraded from passive to active safety systems to maintain negative pressure during all normal and offnormal conditions (i.e., loss of site power [LOSP] or seismic design basis earthquake [DBE]). As part of the changes from the material-at-risk (MAR) accident analysis, the postulated aerosol loading was increased by order of magnitude. This is affecting PVV/PVPs ability to meet functional requirements during off-normal condition.

WTP is evaluating alternate strategies to resolve this issue that include reliance on current equipment performance, additional in-line filtration equipment, reduction of calculation conservatisms testing for aerosol generation rate, etc. The plan is to have a design decision by September 2011 to support equipment procurement.

Design and fabrication of vessel HLP-22, is the critical path for the PT Facility. Re-analysis and design modifications necessary to mitigate increased stress levels of vessels due to seismic and other dynamic load increases continue. The engineering analysis/drawings are scheduled to be completed by the end of April 2011. Efforts are also ongoing for the analysis of the on-site vessels in order to support the vessel modifications. The permitting strategy for the first group of on-site vessels to be modified has been developed jointly with Ecology. Initial site work and pre-modification preparation work has begun. Schedules for the vessel modifications and permit needs have been provided to Ecology for their resource planning. The current plan is to award the first set of vessels modifications by the end of April 2011. Permitting strategy for the off-site vessel modifications are under discussions with Ecology for finalizing.

The physical benchmark testing of the LOAM for application to the 5 non-Newtonian vessels is complete. The results of the testing are still under evaluation to determine the validity of LOAM for the 5 non-Newtonian vessels.

# High-Level Waste (HLW) Facility

#### Significant Past Accomplishments:

Since the transition of the Filter Cave from the procurement to the installation phase in January, C5V duct work continues as planned. Following the installation of the 60-inch diameter C5V supply header, a second 60-inch diameter header (for collecting the downstream exhaust of the C5V HEPA filters) was installed along the east wall in early February. Work continued this period on the west wall header with the alignment and installation of the 42-inch C5V duct expansion loop. With the completion of these major C5V components, installation of structural steel, pipe, and other components are available throughout the Filter Cave.

During the period BNI completed Civil, Structural, and Architectural Title II Design Complete Contract Milestone on February 17, 2011. DOE-WTP staff is currently in the process of validating the milestone deliverables and supporting information prior to approval of the milestone package.

In a major step toward the qualification and delivery of the WTP HEPA filter units, seismic qualification testing of the HEPA filter seals was successfully completed on February 22, 2011 and witnessed by Contractor and DOE-WTP staff.

# Significant Planned Actions in the Next Six Months:

- Receive Initial Delivery of C5V HEPA Filter Housings
- Receive Canister Decontamination Vessels and Canister Rinse Vessel
- Set Shielded Personnel Access Door RWH-DOOR-20 in the Waste Drum Swabbing and Monitoring Area
- Complete Fabrication of C5V Dampers
- Commence Siding and Roofing of Annex

#### Issues:

Crane availability for Filter Cave component installation has been reduced. Construction Management conducted a "Safety Pause for Crane Awareness" at the WTP site on February 14, 2011. The Field Safety Assurance staff participated in a critique and root cause analysis for two recent crane incidents. Corrective actions included implementation of a series of three training courses for Signalmen, Bellmen, and Flaggers requiring personnel to pass both written and practical examinations. Until the corrective actions have been completed, more stringent restrictions for crane usage and swing paths have been implemented as a precautionary measure.

Delays in deliveries from the commodity vendors have resulted in increased coordination efforts, schedule re-sequencing, and order prioritizations in order to avoid impacting Construction. The Contractor is working to identify process improvements and enhance the interfacing in order to reduce potential future schedule delays.

The fabrication and delivery of HLW vessels is also being monitored closely. Vessel status and progress is reported weekly to ensure completion and delivery prior to the scheduled installation dates.

# Low-Activity Waste (LAW) Facility

### **Significant Past Accomplishments:**

The LAW Facility will vitrify low-activity waste from the PT Facility. Waste will be mixed with glass formers, vitrified into glass at an average daily rate of 30 metric tons, and placed in stainless-steel canisters that will be disposed on site in the Integrated Disposal Facility. Overall facility percent complete is 64%, engineering is 89%, procurement is 82%, and construction is 62%.

In December 2010, the facility percent complete values for Design/Engineering and Construction decreased. This decrease in values was tied to the incorporation of the remaining External Flowsheet Review Team (EFRT) Issues. This resulted in an increase in the facility engineering and construction budgets, which has correspondingly reduced the to-date percent complete values.

#### Engineering

BNI Engineering issued Controls and Instrumentation (C&I) data sheets for LAW safety radar level detection instruments and completed C&I design verification for the safety system requirements specification. Two confirmed calculations were issued: 1) *Purge Water Flow Rate and Supply Line Sizing*, and 2) *HVAC Heating and Cooling Load Calculations General Design Criteria*. The Component Information System (CIS) list was issued for the LAW concentrate receipt process (LCP) system. Engineering also issued control logic diagrams for the LAW ASX auto-sampling system and the container pour handling (LPH) system, all to support control software development. C&I software was developed for the LAW Carbon Dioxide Gas (CDG) system.

#### Procurement

Procurement activities included release for vendor shipment of four melter lid cooling water pumps, two melter lid closed-loop heat exchangers, and several pressure regulators.

#### Construction

During February, BNI completed electrical equipment installation in the LAW switchgear building, as well as Thermite welding of rails in the South finishing line. Construction activities were initiated for the installation of two finishing line doors. Thermite welding of rails in the North finishing line continued, as well as installation of the ASX auto-sampling system, fire alarm system, medium voltage electrical buss ductwork, and two pumps for the primary off-gas process (LOP) system. Other normal activities continued, including installation of piping and hangers, cable tray, conduit and wiring, instrument enclosures, lighting fixtures, partition wall framing, gypsum wallboard, and perimeter sealants.

#### Commissioning

Process steps associated with transferring waste from the Treated LAW Concentrate Vessel in the Pretreatment facility to the LAW Concentrate Receipt Vessels in the LAW facility were discussed and documentation of this process was prepared for review. Development continued on a draft schedule fragnet for LAW operations that includes typical batch transfer from the Pretreatment facility through processing and finishing of Immobilized Low-Activity Waste (ILAW) containers.

# **Significant Planned Actions in the Next Six Months:**

- Complete installation of LAW personnel elevator
- Complete vendor fabrication of the Carbon Bed Adsorber (CBA)

#### **Issues:**

No major issues.

# **Analytical Laboratory**

#### **Significant Past Accomplishments:**

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. Overall facility complete for LAB is 46%, engineering is 80%, procurement is 74%, and construction is 64%.

In December 2010, the facility percent complete values for Design/Engineering and Construction decreased. This decrease in values was tied to the incorporation of the remaining External Flowsheet Review Team (EFRT) Issues. This resulted in an increase in the facility engineering and construction budgets, which has correspondingly reduced the to-date percent complete values.

#### Engineering

BNI engineering completed specifications for the high purity gas system and the architectural drawings for C5V system High-Efficiency Particulate Air (HEPA) filter ceiling.

#### Procurement

BNI procurement released three Integrated Control Network enclosure controllers to ship and engineering workstation equipment ASX-SMPLR-00034 to ship for the autosampling (ASX) system.

#### Construction

BNI construction began installation of the bogie shield door/waste drum transfer hatch. BNI construction continued installation of piping in the C2V/C3V system pits and shielding for the ASX system.

#### Commissioning

An evaluation of potential high noise areas revealed two areas of concern: the HVAC rooms on the 2<sup>nd</sup> floor and rooms in the NW corner of the lab that house the ASX and Process Vacuum Air (PVA) systems, as well as C2, C3, and C5 fans and filters. Additionally, a draft report on data quality requirements for WTP feed acceptance (ICD-19) was distributed.

#### Significant Planned Actions in the Next Six Months:

- Install LAB waste drum bogie shield door
- Complete LAB C5 ventilation filter room ceiling design

#### **Issues:**

No major issues.

# **Balance of Facilities (BOF)**

#### **Significant Past Accomplishments:**

BOF provides services and utilities to support operation of the main production facilities – PT, HLW, LAW, and LAB. Overall facility percent complete for BOF is 46%, engineering is 76%, procurement is 46%, and construction is 60%.

In December 2010, the facility percent complete values for Design/Engineering and Construction decreased. This decrease in values was tied to the incorporation of the remaining External Flowsheet Review Team (EFRT) Issues. This resulted in an increase in the facility engineering and construction budgets, which has correspondingly reduced the to-date percent complete values.

#### Engineering

BNI Engineering issued a TCN for material testing/G321E clarifications for the ammonia storage pressure vessels.

#### Procurement

The Emergency Diesel Generator (EDG) quote has been received and is being evaluated. The CO<sub>2</sub> vessel has been delivered. Material requisitions quotes were issued for venturi critical-flow piping and to purchase scald protection valves (piping specialty items). BNI issued Component Information System (CIS) equipment lists for the Ammonia Reagent (AMR) system.

#### Construction

BNI construction continued installation of the fire alarm detection system in the T-52 Warehouse, performing pressure tests in the Water Treatment Facility (WTF), and working on the punch list of items for turnover of glass former control building. BNI construction completed installation of the reverse-osmosis skid/piping at the WTF.

#### Commissioning

A review was performed of the CO<sub>2</sub> pelletizer ductwork from the reject hopper to the C3 ductwork.

#### Significant Planned Actions in the Next Six Months:

- Award EDG procurement
- Complete concrete placements for BOF Ammonia Facility
- Receive BOF ammonia vaporizer skid
- Complete water treatment facility

#### Issues:

No major issues

		Waste T	te Trea	reatment Plant Project - Percent Complete Status Through January 2011	ant Project - Perce Through January 2011	: - Perce Jary 2011	nt Comple	te Status				
(Dollars - Millions)	Overall Faci Unall	Overall Facility Percent Complet Unallocated Dollars	mplete	Desig Unall	Design/Engineering Unallocated Dollars	o s	P.	Procurement Unallocated Dollars		So Unalic	Construction Unallocated Dollars	
	Performance	Budgeted		Performance	Budgeted Cost of		Performance	Budgeted Cost of		Performance	Budgeted Cost of	
	Measurement   Cost of Work	Cost of Work		Measurement	Work		Measurement	Work		Measurement	Work	
	Baseline		%	Baseline	О	%	Baseline	Performed	%	Baseline	Performed	%
Facilities	(PMB)	(BCWP)	Complete	(PMB)	(BCWP)	Complete	(PMB)	(BCWP)	Complete	(PMB)	(BCWP)	Complete
Low-Activity Waste	933.6	597.1	64%	221.9	197.9	%68	232.2	189.6	85%	330.2	203.4	62%
Analytical Lab	340.5	156.7	46%	52.2	41.6	%08	55.9	41.3	74%	97.2	62.3	%4%
Balance of Facilities	521.5	239.9	46%	77.9	59.0	%92	81.1	37.2	46%	226.4	135.6	%09
High-Level Waste	1,433.4	741.8	52%	333.2	284.2	85%	443.3	279.1	63%	539.2	174.4	32%
Pretreatment	2,429.3	1,118.7	47%	674.4	513.8	%92	701.3	299.4	43%	870.9	300.1	34%
Shared Services	4,791.9	3,116.4	65%	1,104.4	861.0	78%	466.9	334.5	72%	1,414.9	985.9	%0/
Total WTP w/o UB	10,450.2	5,970.5	27%	2,464.1	1,957.4	%62	1,980.8	1,181.1	%09	3,478.7	1,861.9	54%
Undistributed Budget	7.2	n/a	n/a	n/a	n/a	n/a	e/u	n/a	n/a	n/a	n/a	n/a
Total WTP	10,457.4	5,970.5	21%	2,464.1	1,957.4	%62	1,980.8	1,181.1	%09	3,478.7	1,861.9	54%

Source: WTP Contract Performance Report - Data for January 2011

The decrease in values was tied to Phase I of BNI's elimination of WBS 1.08, Plant Wide EPCC; scope from WBS 1.08 was moved to facilities as appropriate or to WBS 1.90, Shared Services. This resulted in an increase in the facility construction budgets, which has correspondingly reduced the to-date percent complete values. In July 2010 the allocation of 1.90 to the facilities was removed to show true Note: Starting with the June 2009 report, facility Construction percent complete values decreased significantly, and a couple of Design/Engineering facility percent complete values went down as well. facility percent complete. 

# Office of River Protection Consent Decree 08-5085-FVS

**Project Summary Report** 

March 22, 2011

# Office of River Protection

# Consent Decree 08-5085-FVS Project Summary Report March 22, 2011 9:00 a.m. – 12:00 p.m.

Page	Topic	Leads
1	Statistics / Status	Woody Russell / Dan McDonald / Jeff Lyon
4	SST Retrieval and Closure - D-00B-01, -02, -03, -04 - TWRWP Status	Chris Kemp / Jeff Lyon
7	WTP - Immobilization Plant Project  - D-00A-06, D-00A-17, D-00A-01	Wahed Abdul /Jeff Trent / Gary Olsen/ Dan McDonald
10	WTP Pretreatment (PT) Facility  – D-00A-18, -19, -13, -14, -15, 16	Wahed Abdul / Dan McDonald
13	High-Level Waste (HLW) Facility  – D-00A-20, -21, 02, 03	Jeff Trent / Dan McDonald
16	Low-Activity Waste (LAW) Facility  – D-00A-07, -08, -09	
19	Analytical Laboratory (LAB)  – D-00A-005	Gary Olsen / Dan McDonald
21	Balance of Facilities (BOF)  – D-00A-12	

	Dispute Resolution								
	In Dispute Abeyance Resolution								
	In Program Planning								
	Deleted								
	In Litigation								
tatus	Missed								
estone S	To Be Missed		1			у.			
Fiscal Year 2011 Consent Decree Milestone Status	Recoverable					ahead activit			
nsent ]	At Risk					nonths			
2011 Co	On Schedule			X	×	in a two-r		×	
iscal Year	Date Completed	01/13/10	2/25/11			ary to mainta			
H	Due Date	12/31/10	02/28/11	03/31/11	04/30/11	ed as necess		07/31/11	
	Description	Complete Construction of Structural Steel to Elevation 14' in HLW Facility	Submit to Ecology and Oregon Monthly Summary Reports	D-00C-02E Submit to Ecology and Oregon Monthly Summary Reports	**D-00C-02F Submit to Ecology and Oregon Monthly Summary Reports	** Future Monthly Reports will be added as necessary to maintain a two-months ahead activity	Submit to Ecology and Oregon Semi-	Annual Report Documenting Progress	During Previous 6 Month Period
	Milestone No.	D-00A-20	D-00C-02D	D-00C-02E	**D-00C-02F	** Future Mon	D-00C-01C		

March 2011

		Fisc	Fiscal Year 2012 Consent Decree Milestone Status	12 Cons	sent De	cree Mile	stone	Status					
Milestone No.	Description	Due Date	Date Completed	On Schedule	At Risk	At Risk Recoverable	To Be Missed	Missed	In Litigation	Deleted	Deleted In Program Planning	In	Dispute Resolution
D-00C-02L	Submit to Ecology and Oregon Monthly Summary Reports	10/31/11		×									
**D-00C-02M	**D-00C-02M Submit to Ecology and Oregon Monthly Summary Reports	11/30/11		×									
** Future Moni	** Future Monthly Reports will be added as necessary to maintain a two-months ahead activity	d as necessa	ry to maintai	n a two-m	onths ah	ead activity							
D-00C-01D	Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6 Month Period	01/31/12		×									
D-00C-01E	Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6 Month Period	07/31/12		×									

March 2011

# Reports

D-00C-02 series, Submit to Ecology & State of Oregon Monthly Summary Report Documenting Progress During Previous Month, Due: End of Each Month, Status: On Schedule

D-006-00-A1, Provide State of Oregon notice of meetings in D-006-00-A, etc. no less than 30 days before they are scheduled, Due: 9/25/2013, Status: On Schedule

D-006-00-A, Meet Approximately Every Three Years After Entry of Decree to review requirements of the Consent Decree, Due: 10/25/2013, Status: On Schedule

# **SST Retrieval and Closure Program**

**D-00B-01, Complete Retrieval of Tank Wastes from 10 Remaining SSTs in WMA-C,** Due: 9/30/2014, Status: On Schedule

**D-00B-01A** thru J, Submit Tank Retrieval Complete Certification, Due: TBD Pursuant to the requirement at IV(B)(5) of the Consent Decree (CD) DOE must submit to Ecology a written certification that DOE has completed retrieval of a tank in accordance with the requirements of Appendix "C", Part 1, of the CD. Tanks currently in retrieval status are C-108, C-109, C-110, C-104, and C-111.

**D-00B-02, Advise Ecology of the 9 SST's from which Waste Will Be Retrieved by 2022,** Due: 9/30/2014, Status: On Schedule. ORP and Ecology began meeting on December 13, 2010, to discuss the selection of the next nine tanks to be retrieved and why ORP believes those nine tanks should be in A/AX Farms. The last meeting was held January 18, 2011. The next meeting is scheduled for February 3, 2011, to discuss 242-A Evaporator.

**D-00B-03, Initiate Startup Retrieval in At Least 5 of 9 SSTs in D-00B-02,** Due: 12/31/2017, Status: On Schedule

**D-00B-04, Complete Retrieval of Tank Wastes from the 9 SSTs in D-00B-02,** Due: 9/30/2022, Status: On Schedule

D-00B-04A thru I, Submit Tank Retrieval Complete Certification, Due: TBD

#### **Significant Past Accomplishments:**

- Completed installation of concrete pad around the C-107 new large riser.
- Initiated Site Preparations for C-107 electrical upgrades and control trailer installation.
- Continued testing of a MARS sluice educator system at Columbia Energy in Pasco and continued testing of the MARS sluicing system at Columbia Test Center (CTC) in Richland.
- Continued design activities for C-112 sluicing system.
- Initiated design activities for C-101 sluicing system.
- Continued construction activities for C-108 equipment installation for Hard Heel Removal.

#### **Significant Planned Activities in the Next Six Months:**

- Obtain C-109 heel samples.
- Complete testing of the MARS arm.
- Complete construction/installation of MARs with a sluicing end-effector for C-107 retrieval.
- Initiate construction of C-108 hard heel retrieval system, and start up of retrieval activities.

- Complete C-112 design, initiate long lead procurements and initiate legacy equipment removals.
- Operate hydraulic arm Articulating Mast System (AMS) into C-104 to aid removal of obstruction underneath slurry pump and resume and complete C-104 retrieval.
- Finish testing of the MARS with the vacuum educator.

#### **Issues:**

C-106 Closure Plan approval and SST radiological Categorical Notice of Construction (NOC) Phase 3 (closure) and a toxics categorical NOC application are pending completion of the Tank Closure and Waste Management Environmental Impact Statement (EIS) and associated Record of Decision (ROD); forecast completion for the final EIS ROD is in the Winter of 2011.

# **TWRWP Status**

Tank	TWRWP	Retrieval Technology	Second Technology	Third Technology
C-101	RPP- 22520	MRS (per 10/7/10 agreement, to be Modified Sluicing)	-	-
C-102	RPP- 22393	Modified Sluicing	MS-ITV	-
C-103	RPP- 21895	Retrieval Compl	eted	
C-104	RPP- 22393	Modified Sluicing	MS-ITV	-
C-105	RPP- 22520	MRS	-	-
C-106		Retrieval Compl	eted	
C-107	RPP- 22393	MARS-S		
C-108	RPP- 22393	Modified Sluicing	Chemical Dissolution	MS-ITV
C-109	RPP- 21895	Modified Sluicing	MS-ITV	-
C-110	RPP- 33116	Modified Sluicing		-
C-111	RPP- 37739	Modified Sluicing	•	-
C-112	RPP- 22393	Modified Sluicing	MS-ITV	-

#### **Issues:**

- ORP requested a schedule for any future TWRWP changes.
- DOE wants to issue a revised Tank Retrieval Technology Roadmap Document and ORP want to resolve 2<sup>nd</sup> and 3<sup>rd</sup> technology discussion.
- ORP wants to reopen discussion on end of retrieval discussions that include cost benefit analysis and how the finish of a retrieval decision occurs.

# Hanford Waste Treatment and Immobilization Plant (WTP) Project

D-00A-06, Complete Methods Validations, Due: 12/31/2017, Status: On Schedule

D-00A-17, Hot Start of Waste Treatment Plant, Due: 12/31/2019, Status: On Schedule

D-00A-01, Achieve Initial Plant Operations for WTP, Due: 12/31/2022, Status: On Schedule

There are about 3,200 FTE equivalent contractor [Bechtel National Inc. (BNI)] and subcontractor personnel working on the WTP Project, including 1,060 craft, 540 non-manual, and about 195 subcontractor personnel FTE equivalents working at the WTP construction site (all facilities). Overall project percent complete through January 2011 is 57%, design and engineering is 79% complete, procurement is 60% complete and construction is 54% complete.

In January 2011, the facility percent complete values for Design/Engineering decreased. This decrease in values was tied to the incorporation of the BNI Forecast Update Four EAC. This resulted in an increase in the facility engineering budget, which has correspondingly reduced the to-date percent complete values.

The overall WTP Project Schedule Variance (SV) in December was a positive \$1.8M, the Cost Variance (CV) was a positive (\$6.4M). Both the positive cost and schedule variances came primarily from the Construction and Plant Equipment control accounts.

Following is the status through the end of January for current project issues:

#### **Significant Past Accomplishments:**

- Revised Project Execution Plan sent to HQ first week of March
- BNI & WRPS working to submit and integrated management/technical proposal for a one system approach to meet the "2020 vision for the WTP Project Transition to Operations"
- BNI completed the HLW Civil, Structural, and Architectural Title II Design Complete Contract Milestone on February 17, 2011
- Low Order Accumulation Model (LOAM) benchmarking tsts for Non-Newtonian vessel configuration are complete.

#### **Significant Planned Actions in the Next Six Months:**

- There will be a mini Construction Project Review in March 2011
- A full Construction Project Review is scheduled for May 2011
- Complete analytical results from the Low Order Accumulation Model (LOAM) validation testing for the non-Newtonian vessel configuration

- Erection of PT 4<sup>th</sup> tier structural steel (77ft to 98ft elevation)
- Commence Siding and Roofing of HLW Annex
- Complete vendor fabrication of the LAW Carbon Bed Adsorber (CBA
- Complete the BOF water treatment facility

#### **Issues:**

No significant issues at this time.

WTP - Fiscal Year To-Date Performance

#### **EXC-01a: Fiscal Year Cost and Schedule Report**



Monthly EVMS Monthly and Fiscal Year Values



**Earned Value Month** 

Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2010	\$48,550	\$49,962	\$55,880	1.03	0.89	\$48,550	\$49,962	\$55,880	1.03	0.89
Nov 2010	\$56,608	\$55,427	\$58,449	0.98	0.95	\$105,158	\$105,389	\$114,329	1.00	0.92
Dec 2010	\$64,533	\$71,852	\$73,610	1.11	0.98	\$169,691	\$177,241	\$187,939	1.04	0.94
Jan 2011	\$55,988	\$57,756	\$51,327	1.03	1.13	\$225,679	\$234,997	\$239,266	1.04	0.98
Feb 2011	\$64,495					\$290,174				
Mar 2011	\$64,996					\$355,170				
Apr 2011	\$64,783					\$419,954				
May 2011	\$58,696					\$478,649				
Jun 2011	\$59,092					\$537,742				
Jul 2011	\$88,480					\$626,221				
Aug 2011	\$66,582					\$692,803				
Sep 2011	\$60,343					\$753,146				
PTD	\$5,953,029	\$5,970,545	\$5,997,295	1.00	1.00					

## Pretreatment (PT) Facility

D-00A-19, Complete Elevation 98' Concrete Floor Slab in PT Facility, Due: 12/31/2014,

Status: On Schedule

D-00A-13, Complete Installation of Pretreatment Feed Separation Vessels, Due:

12/31/2015, Status: On Schedule

D-00A-14, PT Facility Construction Substantially Complete, Due: 12/31/2017,

Status: On Schedule

D-00A-15, Start PT Facility Cold Commissioning, Due: 12/31/2018, Status: On Schedule

D-00A-16, PT Facility Hot Commissioning Complete, Due: 12/31/2019, Status: On Schedule

#### **Significant Past Accomplishments:**

The Pretreatment Facility (PT) will separate radioactive tank waste into High Level Waste (HLW) and Low-Activity Waste (LAW) fractions and transfer each waste type to the respective vitrification facility for immobilization. Overall facility percent complete is 47%, engineering is 76% complete, procurement is 43% complete, and construction is 34% complete.

Overall construction continues to perform well. Rebar and embed installation and fabrication of rebar wall curtains continues to support additional slab and wall placements at the 77ft and 98ft elevation. Construction completions for the month of February include: placement of two 5<sup>th</sup> lift (77ft to 9-ft elevation) walls (5-25 and 5-31, ~160 CY), prefabrication of rebar curtains for three walls, installation of two Plant Wash and Disposal vessels, and fabrication and delivery of pipe spools in the hot cell.

On-going work includes: erection on the 4<sup>th</sup> tier structural steel on the northwest corner of the 77ft elevation, fireproofing, drain and process piping, cable trays and supports, and HVAC ductwork.

Engineering continues to implement changes from the technical issue resolutions into the P&ID drawings and other design documents. In February, PT engineering issued the Cesium Ion Exchange (CXP) system electrical wiring diagrams for construction, and issued the electrical grounding layout drawings for the 28ft elevation. In addition, one hundred and thirty electrical circuits were designed and eighty four electrical circuits were routed.

Material requisitions for quote on floor penetration offset assembly modules, plant wash and fluidic racks, and two safety flush vessels are issued.

#### **Significant Planned Actions in the Next Six Months:**

- Complete analytical results from the Low Order Accumulation Model (LOAM) validation testing for the non-Newtonian vessel configuration
- Complete planning for the Large Scale testing for the validation of vessel mixing Scale-up
- Issue the revised design option and P&ID's for the Process Vessel Vent System (PVV) and the Pretreatment Vessel Vent Process (PVP) system
- Complete the coupled dynamic analysis for the Waste Feed (FEP) and Treated Law (TLP) evaporators
- Complete fabrication of two major Jumper frames
- Complete placement of 1 slab, 2 basements, and 26 walls, totaling about ~6,200 CY
- Erection of 4<sup>th</sup> tier structural steel (77ft to 98ft elevation)
- Release four Solenoid Valve Utility Racks to Fabrication
- Fabricate and deliver 38 pipe spools, and begin fabrication on an additional 28 pipe spools.

#### **Issues:**

The PT vessel vent process (PVP) and vessel vent exhaust (PVV) systems are being upgraded from passive to active safety systems to maintain negative pressure during all normal and offnormal conditions (i.e., loss of site power [LOSP] or seismic design basis earthquake [DBE]). As part of the changes from the material-at-risk (MAR) accident analysis, the postulated aerosol loading was increased by order of magnitude. This is affecting PVV/PVPs ability to meet functional requirements during off-normal condition.

WTP is evaluating alternate strategies to resolve this issue that include reliance on current equipment performance, additional in-line filtration equipment, reduction of calculation conservatisms testing for aerosol generation rate, etc. The plan is to have a design decision by September 2011 to support equipment procurement.

Design and fabrication of vessel HLP-22, is the critical path for the PT Facility. Re-analysis and design modifications necessary to mitigate increased stress levels of vessels due to seismic and other dynamic load increases continue. The engineering analysis/drawings are scheduled to be completed by the end of April 2011. Efforts are also ongoing for the analysis of the on-site vessels in order to support the vessel modifications. The permitting strategy for the first group of on-site vessels to be modified has been developed jointly with Ecology. Initial site work and pre-modification preparation work has begun. Schedules for the vessel modifications and permit needs have been provided to Ecology for their resource planning. The current plan is to award the first set of vessels modifications by the end of April 2011. Permitting strategy for the off-site vessel modifications are under discussions with Ecology for finalizing.

The physical benchmark testing of the LOAM for application to the 5 non-Newtonian vessels is complete. The results of the testing are still under evaluation to determine the validity of LOAM for the 5 non-Newtonian vessels.

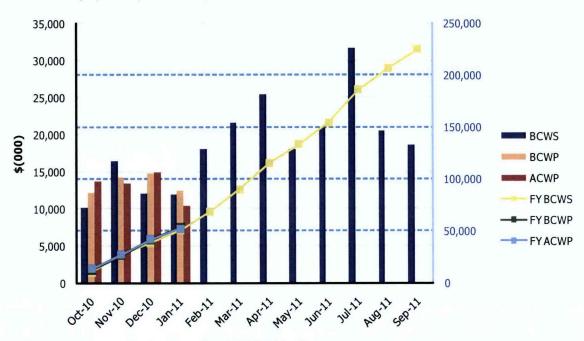
**EXC-01a: Fiscal Year Cost and Schedule Report** 

Data Set: FY 2011 Earned Value Data

River Protection

01-D-16E - Pretreatment Facility

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



**Earned Value Month** 

Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2010	\$10,196	\$12,179	\$13,730	1.19	0.89	\$10,196	\$12,179	\$13,730	1.19	0.89
Nov 2010	\$16,462	\$14,257	\$13,360	0.87	1.07	\$26,658	\$26,436	\$27,090	0.99	0.98
Dec 2010	\$12,060	\$14,788	\$14,869	1.23	0.99	\$38,718	\$41,224	\$41,959	1.06	0.98
Jan 2011	\$11,902	\$12,449	\$10,403	1.05	1.20	\$50,620	\$53,673	\$52,362	1.06	1.03
Feb 2011	\$18,023					\$68,643				
Mar 2011	\$21,614					\$90,256				
Apr 2011	\$25,435					\$115,691				
May 2011	\$17,988					\$133,679				
Jun 2011	\$20,895					\$154,574				
Jul 2011	\$31,672					\$186,246				
Aug 2011	\$20,486					\$206,732				
Sep 2011	\$18,585					\$225,317				

PTD \$1,106,523 \$1,118,711 \$1,085,843 1.01 1.03

## High-Level Waste (HLW) Facility

**D-00A-21, Complete Construction of Structural Steel to 37' in HLW Facility,** Due: 12/31/2012, Status: On Schedule

**D-00A-02, HLW Facility Construction Substantially Complete**, Due: 12/31/2016, Status: On Schedule

D-00A-03, Start HLW Facility Cold Commissioning, Due: 6/30/2018, Status: On Schedule

**D-00A-04, HLW Facility Hot Commissioning Complete,** Due: 12/31/2019, Status: On Schedule

The High Level Waste (HLW) Facility will receive the separated high-level waste from the Pretreatment (PT) facility. The concentrate is blended with glass formers and converted into molten glass in one of the two HLW melters and then poured into cylindrical stainless steel canisters. After cooling, the canisters are sealed and decontaminated prior to shipment to interim storage. The HLW Facility is 52% complete overall, with engineering design 85% complete, procurement 63% complete, and construction 32% complete.

#### **Significant Past Accomplishments:**

Since the transition of the Filter Cave from the procurement to the installation phase in January, C5V duct work continues as planned. Following the installation of the 60-inch diameter C5V supply header, a second 60-inch diameter header (for collecting the downstream exhaust of the C5V HEPA filters) was installed along the east wall in early February. Work continued this period on the west wall header with the alignment and installation of the 42-inch C5V duct expansion loop. With the completion of these major C5V components, installation of structural steel, pipe, and other components are available throughout the Filter Cave.

During the period BNI completed Civil, Structural, and Architectural Title II Design Complete Contract Milestone on February 17, 2011. DOE-WTP staff is currently in the process of validating the milestone deliverables and supporting information prior to approval of the milestone package.

In a major step toward the qualification and delivery of the WTP HEPA filter units, seismic qualification testing of the HEPA filter seals was successfully completed on February 22, 2011 and witnessed by Contractor and DOE-WTP staff.

#### **Significant Planned Actions in the Next Six Months:**

- Receive Initial Delivery of C5V HEPA Filter Housings
- Receive Canister Decontamination Vessels and Canister Rinse Vessel
- Set Shielded Personnel Access Door RWH-DOOR-20 in the Waste Drum Swabbing and Monitoring Area
- Complete Fabrication of C5V Dampers
- Commence Siding and Roofing of Annex

#### **Issues:**

Crane availability for Filter Cave component installation has been reduced. Construction Management conducted a "Safety Pause for Crane Awareness" at the WTP site on February 14, 2011. The Field Safety Assurance staff participated in a critique and root cause analysis for two recent crane incidents. Corrective actions included implementation of a series of three training courses for Signalmen, Bellmen, and Flaggers requiring personnel to pass both written and practical examinations. Until the corrective actions have been completed, more stringent restrictions for crane usage and swing paths have been implemented as a precautionary measure.

Delays in deliveries from the commodity vendors have resulted in increased coordination efforts, schedule re-sequencing, and order prioritizations in order to avoid impacting Construction. The Contractor is working to identify process improvements and enhance the interfacing in order to reduce potential future schedule delays.

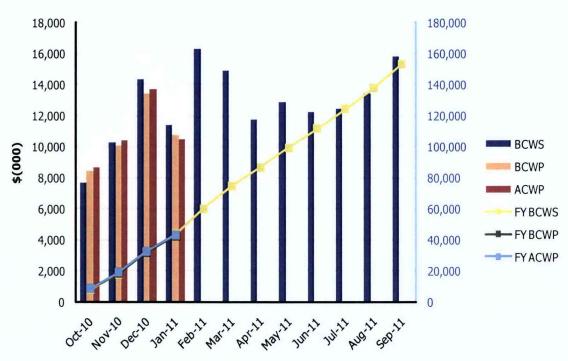
The fabrication and delivery of HLW vessels is also being monitored closely. Vessel status and progress is reported weekly to ensure completion and delivery prior to the scheduled installation dates.

**EXC-01a: Fiscal Year Cost and Schedule Report** 

Data Set: FY 2011 Earned Value Data Data as of: Jan 2011

## River Protection 01-D-16D - High-Level Waste Facility

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



**Earned Value Month** 

Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2010	\$7,653	\$8,413	\$8,615	1.10	0.98	\$7,653	\$8,413	\$8,615	1.10	0.98
Nov 2010	\$10,239	\$10,032	\$10,434	0.98	0.96	\$17,892	\$18,445	\$19,049	1.03	0.97
Dec 2010	\$14,364	\$13,384	\$13,697	0.93	0.98	\$32,256	\$31,829	\$32,746	0.99	0.97
Jan 2011	\$11,360	\$10,767	\$10,461	0.95	1.03	\$43,616	\$42,596	\$43,207	0.98	0.99
Feb 2011	\$16,291					\$59,907				
Mar 2011	\$14,924					\$74,831				
Apr 2011	\$11,756					\$86,587				
May 2011	\$12,848					\$99,435				
Jun 2011	\$12,220					\$111,655				
Jul 2011	\$12,471					\$124,126				
Aug 2011	\$13,392					\$137,517				
Sep 2011	\$15,817					\$153,334				
PTD	\$738,036	\$741,812	\$732,334	1.01	1.01					

## Low-Activity Waste (LAW) Facility

**D-00A-07, LAW Facility Construction Substantially Complete,** Due: 12/31/2014, Status: On Schedule

D-00A-08, Start LAW Facility Cold Commissioning, Due: 12/31/2018, Status: On Schedule

**D-00A-09, LAW Facility Hot Commissioning Complete,** Due: 12/31/2019, Status: On Schedule

#### **Significant Past Accomplishments:**

The LAW Facility will vitrify low-activity waste from the PT Facility. Waste will be mixed with glass formers, vitrified into glass at an average daily rate of 30 metric tons, and placed in stainless-steel canisters that will be disposed on site in the Integrated Disposal Facility. Overall facility percent complete is 64%, engineering is 89%, procurement is 82%, and construction is 62%.

In December 2010, the facility percent complete values for Design/Engineering and Construction decreased. This decrease in values was tied to the incorporation of the remaining External Flowsheet Review Team (EFRT) Issues. This resulted in an increase in the facility engineering and construction budgets, which has correspondingly reduced the to-date percent complete values.

#### Engineering

BNI Engineering issued Controls and Instrumentation (C&I) data sheets for LAW safety radar level detection instruments and completed C&I design verification for the safety system requirements specification. Two confirmed calculations were issued: 1) *Purge Water Flow Rate and Supply Line Sizing*, and 2) *HVAC Heating and Cooling Load Calculations General Design Criteria*. The Component Information System (CIS) list was issued for the LAW concentrate receipt process (LCP) system. Engineering also issued control logic diagrams for the LAW ASX auto-sampling system and the container pour handling (LPH) system, all to support control software development. C&I software was developed for the LAW Carbon Dioxide Gas (CDG) system.

#### Procurement

Procurement activities included release for vendor shipment of four melter lid cooling water pumps, two melter lid closed-loop heat exchangers, and several pressure regulators.

#### Construction

During February, BNI completed electrical equipment installation in the LAW switchgear building, as well as Thermite welding of rails in the South finishing line. Construction activities were initiated for the installation of two finishing line doors. Thermite welding of rails in the

North finishing line continued, as well as installation of the ASX auto-sampling system, fire alarm system, medium voltage electrical buss ductwork, and two pumps for the primary off-gas process (LOP) system. Other normal activities continued, including installation of piping and hangers, cable tray, conduit and wiring, instrument enclosures, lighting fixtures, partition wall framing, gypsum wallboard, and perimeter sealants.

#### Commissioning

Process steps associated with transferring waste from the Treated LAW Concentrate Vessel in the Pretreatment facility to the LAW Concentrate Receipt Vessels in the LAW facility were discussed and documentation of this process was prepared for review. Development continued on a draft schedule fragnet for LAW operations that includes typical batch transfer from the Pretreatment facility through processing and finishing of Immobilized Low-Activity Waste (ILAW) containers.

#### **Significant Planned Actions in the Next Six Months:**

- Complete installation of LAW personnel elevator
- Complete vendor fabrication of the Carbon Bed Adsorber (CBA)

#### **Issues:**

No major issues.

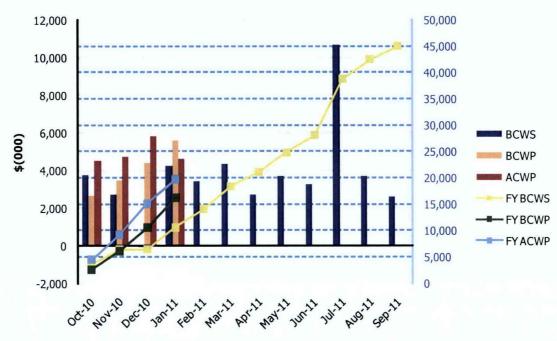
**EXC-01a: Fiscal Year Cost and Schedule Report** 

Data Set: FY 2011 Earned Value Data

River Protection

01-D-16A - Low-Activity Waste Facility

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



**Earned Value Month** 

Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2010	\$3,743	\$2,654	\$4,511	0.71	0.59	\$3,743	\$2,654	\$4,511	0.71	0.59
Nov 2010	\$2,732	\$3,462	\$4,752	1.27	0.73	\$6,475	\$6,116		0.94	0.66
Dec 2010	(\$84)	\$4,424	\$5,823	-52.67	0.76	\$6,391	\$10,540	\$15,086	1.65	0.70
Jan 2011	\$4,232	\$5,597	\$4,606	1.32	1.22	\$10,623	\$16,137	\$19,692	1.52	0.82
Feb 2011	\$3,440					\$14,063				
Mar 2011	\$4,325					\$18,388				
Apr 2011	\$2,725					\$21,113				
May 2011	\$3,698					\$24,811				
Jun 2011	\$3,260					\$28,071				
Jul 2011	\$10,689					\$38,760				
Aug 2011	\$3,690					\$42,450				
Sep 2011	\$2,610					\$45,059				
PTD	\$599,093	\$597,076	\$642,789	1.00	0.93					

## **Analytical Laboratory**

**D-00A-05, LAB Construction Substantially Complete,** Due: 12/31/2012, Status: On Schedule

#### **Significant Past Accomplishments:**

The LAB will support WTP operations by analyzing feed, vitrified waste, and effluent streams. Overall facility complete for LAB is 46%, engineering is 80%, procurement is 74%, and construction is 64%.

In December 2010, the facility percent complete values for Design/Engineering and Construction decreased. This decrease in values was tied to the incorporation of the remaining External Flowsheet Review Team (EFRT) Issues. This resulted in an increase in the facility engineering and construction budgets, which has correspondingly reduced the to-date percent complete values.

#### Engineering

BNI engineering completed specifications for the high purity gas system and the architectural drawings for C5V system High-Efficiency Particulate Air (HEPA) filter ceiling.

#### Procurement

BNI procurement released three Integrated Control Network enclosure controllers to ship and engineering workstation equipment ASX-SMPLR-00034 to ship for the autosampling (ASX) system.

#### Construction

BNI construction began installation of the bogie shield door/waste drum transfer hatch. BNI construction continued installation of piping in the C2V/C3V system pits and shielding for the ASX system.

#### Commissioning

An evaluation of potential high noise areas revealed two areas of concern: the HVAC rooms on the 2<sup>nd</sup> floor and rooms in the NW corner of the lab that house the ASX and Process Vacuum Air (PVA) systems, as well as C2, C3, and C5 fans and filters. Additionally, a draft report on data quality requirements for WTP feed acceptance (ICD-19) was distributed.

#### **Significant Planned Actions in the Next Six Months:**

- Install LAB waste drum bogie shield door
- Complete LAB C5 ventilation filter room ceiling design

#### Issues:

No major issues.

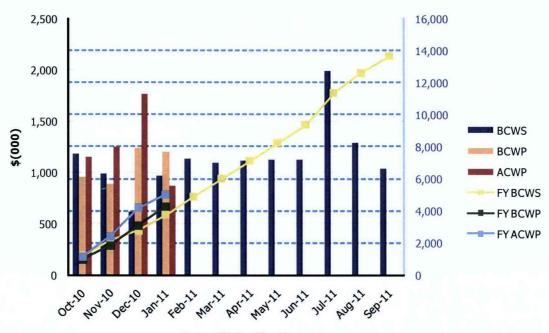
**EXC-01a: Fiscal Year Cost and Schedule Report** 

Data Set: FY 2011 Earned Value Data

Data as of: Jan 2011

#### River Protection 01-D-16B - Analytical Laboratory

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



**Earned Value Month** 

Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2010	\$1,180	\$954	\$1,152	0.81	0.83	\$1,180	\$954	\$1,152	0.81	0.83
Nov 2010	\$984	\$893	\$1,245	0.91	0.72	\$2,164	\$1,847	\$2,397	0.85	0.77
Dec 2010	\$621	\$1,236	\$1,768	1.99	0.70	\$2,785	\$3,083	\$4,165	1.11	0.74
Jan 2011	\$971	\$1,198	\$869	1.23	1.38	\$3,756	\$4,281	\$5,034	1.14	0.85
Feb 2011	\$1,137					\$4,893				
Mar 2011	\$1,096					\$5,990				
Apr 2011	\$1,116					\$7,106				
May 2011	\$1,128					\$8,233				
Jun 2011	\$1,125					\$9,358				
Jul 2011	\$1,986					\$11,344				
Aug 2011	\$1,289					\$12,632				
Sep 2011	\$1,038					\$13,670				

PTD \$156,970 \$156,668 \$169,712 1.00 0.92

## **Balance of Facilities (BOF)**

D-00A-12, Steam Plant Construction Complete, Due: 12/31/2012, Status: On Schedule

#### **Significant Past Accomplishments:**

BOF provides services and utilities to support operation of the main production facilities – PT, HLW, LAW, and LAB. Overall facility percent complete for BOF is 46%, engineering is 76%, procurement is 46%, and construction is 60%.

In December 2010, the facility percent complete values for Design/Engineering and Construction decreased. This decrease in values was tied to the incorporation of the remaining External Flowsheet Review Team (EFRT) Issues. This resulted in an increase in the facility engineering and construction budgets, which has correspondingly reduced the to-date percent complete values.

#### Engineering

BNI Engineering issued a TCN for material testing/G321E clarifications for the ammonia storage pressure vessels.

#### Procurement

The Emergency Diesel Generator (EDG) quote has been received and is being evaluated. The CO<sub>2</sub> vessel has been delivered. Material requisitions quotes were issued for venturi critical-flow piping and to purchase scald protection valves (piping specialty items). BNI issued Component Information System (CIS) equipment lists for the Ammonia Reagent (AMR) system.

#### Construction

BNI construction continued installation of the fire alarm detection system in the T-52 Warehouse, performing pressure tests in the Water Treatment Facility (WTF), and working on the punch list of items for turnover of glass former control building. BNI construction completed installation of the reverse-osmosis skid/piping at the WTF.

#### Commissioning

A review was performed of the CO<sub>2</sub> pelletizer ductwork from the reject hopper to the C3 ductwork.

#### **Significant Planned Actions in the Next Six Months:**

- Award EDG procurement
- Complete concrete placements for BOF Ammonia Facility
- Receive BOF ammonia vaporizer skid
- Complete water treatment facility

#### **Issues:**

No major issues.

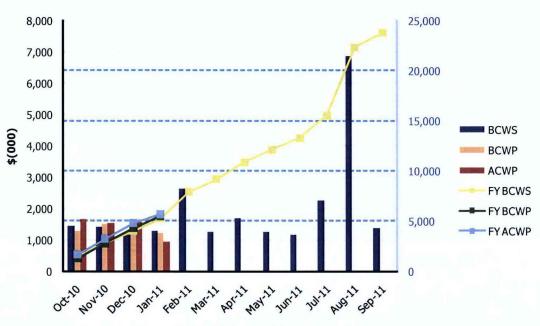
**EXC-01a: Fiscal Year Cost and Schedule Report** 

Data Set: FY 2011 Earned Value Data

Data as of: Jan 2011

#### River Protection 01-D-16C - Balance of Facilities

Facility Specific (unallocated) Monthly and Fiscal-Year-to-Date (FY-TD) EVMS Values



**Earned Value Month** 

Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2010	\$1,428	\$1,272	\$1,660	0.89	0.77	\$1,428	\$1,272	\$1,660	0.89	0.77
Nov 2010	\$1,398	\$1,520	\$1,539	1.09	0.99	\$2,826	\$2,792	\$3,199	0.99	0.87
Dec 2010	\$1,150	\$1,475	\$1,558	1.28	0.95	\$3,976	\$4,267	\$4,757	1.07	0.90
Jan 2011	\$1,302	\$1,224	\$960	0.94	1.28	\$5,278	\$5,491	\$5,717	1.04	0.96
Feb 2011	\$2,634					\$7,912				
Mar 2011	\$1,243					\$9,155				
Apr 2011	\$1,698					\$10,854				
May 2011	\$1,264					\$12,118				
Jun 2011	\$1,168					\$13,286				
Jul 2011	\$2,239					\$15,525				
Aug 2011	\$6,854					\$22,379				
Sep 2011	\$1,384					\$23,762				
PTD	\$240,471	\$239,857	\$237,631	1.00	1.01					

		Was	ste Trea	tment Plan	Plant Project - Percen Through December 2010	t - Perce	Waste Treatment Plant Project - Percent Complete Status Through December 2010	te Status				
(Dollars - Millions)	Overall Faci Unall	Overall Facility Percent Complete Unallocated Dollars	mplete	Desig Unall	Design/Engineering Unallocated Dollars	ig rs	Pr Unall	Procurement Unallocated Dollars	y,	Unalle	Construction Unallocated Dollars	ş
Facilities	Performance Budgeted Measurement Cost of Work Baseline Performed	Budgeted Cost of Work Performed %	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed	% Complete	Performance Measurement Baseline (PMB)	Budgeted Cost of Work Performed	% Complete
Low-Activity Waste	924.8	591.5	64%	219.4	~	%06	233.3	10	80%	315.8	200.7	64%
Analytical Lab	343.2	155.5	45%	51.5	41.5	81%	56.9	41.3	73%	88.7	61.4	%69
Balance of Facilities	523.6	238.6	46%	69.4	58.7	85%	83.9	37.1	44%	226.6	134.8	%09
High-Level Waste	1,417.5	731.1	25%	328.1	283.1	%98	440.1	273.7	%29	523.4	170.2	33%
Pretreatment	2,446.7	1,106.3	47%	623.9	510.0	%82	708.0	297.2	45%	893.3	293.9	33%
Shared Services	4,768.9	3,089.9	%59	1,081.0	855.7	%62	470.2	330.7	%02	1,405.7	977.8	%02
Total WTP w/o UB	10,424.7	5,912.8	21%	2,403.3	1,946.3	81%	1,992.4	1,167.5	%69	3,453.5	1,838.7	23%
Undistributed Budget	65.7	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total WTP	10,490.4	5,912.8	%95	2,403.3	1,946.3	81%	1,992.4	1,167.5	%65	3,453.5	1,838.7	53%

Source: WTP Contract Performance Report

Flowsheet Review Team (EFRT) Issues. This resulted in an increase in the facility engineering and construction budgets, which has correspondingly reduced the to-date percent complete values. Note: In December 2010, the facility percent complete values for Design/Engineering and Construction decreased. This decrease in values was tied to the incorporation of the remaining External

Milestone Title	Milestone Number	Document	TPA Milestone Due Date (if applicable) <sup>1</sup>	ORP Delivery to Regulators Date <sup>2</sup>	Anticipated Regulatory Review Completion Date <sup>3</sup>	Final Completion Date <sup>4</sup>	DOE-ORP Lead	Contractor Lead	Ecology Lead	Comments/Issues
	Supports M-045-61	WMA C PA Ecological Risk Assessment Data Package		04/19/11			B. Lober	S. Eberlein	J. Lyon	Feeds input for M-045-61 and all Closure Plans
	Supports M-045-61	WMA C Characterization Summary 2011		09/30/11			B. Lober	S. Eberlein	J. Lyon	Feeds input for M-045-61 and all Closure Plans
	Supports M-045-61	WMA C PA Initial Model Run Data Package		12/22/11			C. Kemp	S. Eberlein	J. Lyon	Feeds input for M-045-61 and all Closure Plans
Submit to Ecology for Review and Approval as an Agreement Primary Document, a Phase	Supports M-045-61	PA Data PackageNumeric Codes		12/31/11	0.0		C. Kemp	S. Eberlein	J. Lyon	Feeds input for M-045-61 and all Closure Plans
2 RCRA Facility Investigation/Corrective Measure Study Report for WMA C	Supports M-045-61	WMA C PA Initial Document		02/28/12			C. Kemp	S. Eberlein	J. Lyon	Feeds input for M-045-61 and all Closure Plans
	Supports M-045-61	WMA C Characterization Summary 2012		09/30/12			B. Lober	S. Eberlein	J. Lyon	Feeds input for M-045-61 and all Closure Plans
	Supports M-045-61	WMA C Characterization Summary 2013		09/30/13			B. Lober	S. Eberlein	J. Lyon	Feeds input for M-045-61 and all Closure Plans
	M-045-61	Phase 2 RCRA Facility Investigation/Corrective Measures Study Report for WMA C	12/31/14	12/31/14			B. Lober	S. Eberlein	J. Lyon	
Submit to Ecology for Review and Approval as an Agreement Primary Document, a Phase 2 Corrective Measures Implementation Work Plan for WMA C.	M-045-62	Phase 2 Corrective Measures Implementation Work Plan for WMA C	06/30/15	06/30/15		<b>Y</b>	B. Lober	S. Eberlein	J. Lyon	
	M-045-80	Description of Radioactive Waste Determination Process	01/31/11	12/28/10	04/18/11		C. Kemp	S. Eberlein	J. Lyon	<ul> <li>Initial ORP letter, 10-TPD-166 sent to ECY on 12/28/10</li> <li>ECY review extension to 04/18/11 received by ORP on 02/11/11</li> <li>ORP extension acknowledgement letter 11-TF-031 sent to ECY on 02/23/11</li> </ul>
Complete portions of the C-200 Closure Demonstration Plan necessary to	M-045-80	RCRA/CERCLA Integration White Paper	01/31/11	12/28/10	04/18/11		C. Kemp	S. Eberlein	J. Lyon	<ul> <li>Initial ORP letter, 10-TPD-166 sent to ECY on 12/28/10</li> <li>ECY review extension to 04/18/11 received by ORP on 02/11/11</li> <li>ORP extension acknowledgement letter 11-TF-031 sent to ECY on 02/23/11</li> </ul>
complete closure plan development for the SST system.	M-045-80	Tank Removal Engineering Study	01/31/11	12/28/10	04/18/11		C. Kemp	S. Eberlein	J. Lyon	<ul> <li>Initial ORP letter, 10-TPD-166 sent to ECY on 12/28/10</li> <li>ECY letter for review extension to 04/18/11 received by ORP 01/13/2011</li> <li>ORP extension acknowledgement letter 11-TF-031 sent to ECY on 02/23/11</li> </ul>
	M-045-80	Evaluation of Alternatives for Removal of Waste from the C-301 Catch Tank	01/31/11	12/28/10	04/18/11		C. Kemp	S. Eberlein	J. Lyon	<ul> <li>Initial ORP letter, 10-TPD-166 sent to ECY on 12/28/10</li> <li>ECY review extension to 04/18/11 received by ORP on 02/11/11</li> <li>ORP extension acknowledgement letter 11-TF-031 sent to ECY on 02/23/11</li> </ul>

<sup>&</sup>lt;sup>1</sup> "TPA Milestone Due Dates" are the direct regulatory drivers for completion of milestones.

<sup>&</sup>lt;sup>2</sup> "ORP Delivery to Regulators Dates" are those dates that support future milestones, are submittal dates for permitting activities, or miscellaneous submittals that support ORP actions and represent the dates when ORP submits documents to the regulators. ORP Delivery to Regulators Dates may be earlier than TPA Milestone Due Dates if work is completed ahead of schedule.

3 The "Anticipated Regulatory Review Completion Date" is generated based on TPA Milestone Agreements and TPA Section 9.0 documentation requirements for primary documents. This date will be changed and noted in "Comments/Issues" if extension of review is

requested. If the document is a secondary document or for information only, the "Anticipated Regulatory Review Completion Date" may be listed as "N/A" for not applicable.

<sup>&</sup>lt;sup>4</sup> "Final Completion Date" is entered after the document is reviewed, comments are incorporated, and any disputes are resolved. Any comment resolution issues or disputes will be noted under "Comments/Issues."

Milestone Title	Milestone Number	Document	TPA Milestone Due Date (if applicable) <sup>1</sup>	ORP Delivery to Regulators Date <sup>2</sup>	Anticipated Regulatory Review Completion Date <sup>3</sup>	Final Completion Date <sup>4</sup>	DOE-ORP Lead	Contractor Lead	Ecology Lead	Comments/Issues
Implement and Complete All Remaining Activities in the June 6, 2007 C-200 Closure Demonstration Plan (with any revisions as agreed to by Ecology and	Supports M-045-81	Pipeline Feasibility Study		12/28/10	04/18/11		C. Kemp	S. Eberlein	J. Lyon	<ul> <li>Feeds input to M-045-81.</li> <li>Initial ORP letter 10-TPD-166 sent to ECY on 12/28/10</li> <li>ECY review extension to 04/18/11 received by ORP on 02/11/11</li> <li>ORP extension acknowledgement letter 11-TF-031 sent to ECY on 02/23/11</li> </ul>
DOE).	Supports M-045-81	Update C Closure Demonstration Plan		TBD			C. Kemp	S. Eberlein	J. Lyon	<ul><li>Feeds input to M-045-81</li><li>Awaiting language decision for LDR.</li></ul>
	M-045-81	Other Closure Demonstration Deliverables	09/30/14	09/30/14			C. Kemp	S. Eberlein	J. Lyon	
	M-045- 91G-T05	Provide Report of the Visual Inspection of 12 SSTs Table P3.3	03/31/11	03/11/11			J. Johnson	S. Sax	J. Lyon	<ul> <li>ORP submitted report via letter 11-TF-039 on 03/11/11</li> </ul>
	M-045-91C	Implement DQO Process, Test Plan to Evaluate the Chemistries	09/30/11	09/30/11			J. Johnson	S. Sax	J. Lyon	
	M-045- 91G-T01	Provide AOR Final Doc. for SSTS on 530,000 Gallon Tanks	09/30/11	09/30/11			J. Johnson	S. Sax	J. Lyon	
	M-045-91B	DOE Submit a Sampling and Analysis Plan to Ecology	12/30/11	12/30/11			J. Johnson	S. Sax	J. Lyon	
	M-045-91F- T01	Provide Report of the Liquid Leak Rate Assessments	01/31/12	01/31/12			J. Johnson	S. Sax	J. Lyon	
	M-045-91F- T02	Provide Report of Liner Failures for SSTs	01/31/12	01/31/12			J. Johnson	S. Sax	J. Lyon	
	M-045- 91G-T02	Provide AOR Final Doc. for SSTS on 750,000 Gallon Tanks	01/31/12	01/31/12			J. Johnson	S. Sax	J. Lyon	
	M-045-91D	Submit Analytical Test Plan for Cores Removed from C- 107 Plug	03/31/12	03/31/12	1		J. Johnson	S. Sax	J. Lyon	
M-45-91 Interim Milestones and Target Dates for SSTs Implementing the Expert Panel's	M-045- 91G-T06	Provide Report of the Visual Inspection of 12 SSTs M-045-91G-T05	03/31/12	03/31/12			J. Johnson	S. Sax	J. Lyon	
Recommendations (created via TPA Change Request CR M-45-10-01, approved on 01/03/2011)	M-045- 91G-T03	Provide AOR Final Doc. for SSTS on 1,000,000 Gallon Tanks	09/31/12	09/30/12		4.4.5	J. Johnson	S. Sax	J. Lyon	
	M-045- 91D-T01	Provide Report on the Concrete Dome Samples from Tank C-107 Plug	05/31/13	05/31/13			J. Johnson	S. Sax	J. Lyon	
	M-045-91F- T03	Provide Report on Testing for Ionic Conductivity of SSTs	05/31/13	05/31/13			J. Johnson	S. Sax	J. Lyon	'a.m., '
	M-045-91F- T04	Provide Report on 100-Series SSTs as having Leaked in RPP-32681	07/31/13	07/31/13			J. Johnson	S. Sax	J. Lyon	
	M-045-91E	Provide SST Farms Dome Deflection Surveys Every Two Years	09/30/13	09/30/13			J. Johnson	S. Sax	J. Lyon	
	M-045- 91G-T04	Provide AOR Final Doc. for SSTS on 55,000 Gallon Tanks	10/31/13	10/31/13	11-4-4		J. Johnson	S. Sax	J. Lyon	
	M-045-91F	Provide Summary Conclusions Report on Leak Integrity	12/31/13	12/31/13			J. Johnson	S. Sax	J. Lyon	
	M-045-91G	Provide Summary Conclusions Report of AOR for SSTs	04/30/14	04/30/14	1 1		J. Johnson	S. Sax	J. Lyon	
	M-045-91B- T01	Provide Ecology report on the Concrete Core from TankA- 106 or alt	09/30/14	09/30/14			J. Johnson	S. Sax	J. Lyon	

Milestone Title	Milestone Number	Document	TPA Milestone Due Date (if applicable) <sup>1</sup>	ORP Delivery to Regulators Date <sup>2</sup>	Anticipated Regulatory Review Completion Date <sup>3</sup>	Final Completion Date <sup>4</sup>	DOE-ORP Lead	Contractor Lead	Ecology Lead	Comments/Issues
M-45-91 Interim Milestones and Target Dates	M-045-91H	Submit Change Pkg (if necessary) to est. Additional Milestones	07/31/15	07/31/15			J. Johnson	S. Sax	J. Lyon	
(continued)	M-045-91I	Provide IQRPE Certification of SSTs Structural Integrity	09/30/18	09/30/18			J. Johnson	S. Sax	J. Lyon	
	M-045-92	Future Barrier Design 1	06/30/11	06/30/11			B. Lober	S. Eberlein	J. Lyon	
Prior to beginning construction and at least one year before construction is to be	M-045-92	Future Barrier Design 2	06/30/11	06/30/12			B. Lober	S. Eberlein	J. Lyon	
complete, DOE will submit to Ecology a final design and monitoring plan for each interim barrier.	M-045-92	Future Barrier Design 3	06/30/11	06/30/13			B. Lober	S. Eberlein	J. Lyon	
barnor.	M-045-92	Future Barrier Design 4	06/30/11	06/30/14			B. Lober	S. Eberlein	J. Lyon	
Submit to Ecology as an Agreement Primary Document a Catch Tank "assumed leak" Response Plan.	M-045-100	Catch Tank "Assumed Leak" Response Plan (RPP-PLAN-48438)	12/28/10	12/28/10	04/18/11		C. Kemp	S. Eberlein	J. Lyon	Initial ORP letter 10-TPD-176 sent to ECY on 12/28/10     ECY letter for extension to 04/18/11 received by ORP on 02/11/11     ORP extension acknowledgement letter 11-TF-031 sent to ECY on 02/23/11
Submit to Ecology as an Agreement Primary Document a report on all Catch Tanks and associated pipelines that are identified in the SST System Part A, or otherwise used in operations.	M-045-101	SST System Component Identification and Proposed Closure Strategy (RPP-PLAN-41977)	12/27/10	12/28/10	04/18/11		C. Kemp	S. Eberlein	J. Lyon	<ul> <li>Initial ORP letter 10-TPD-176 sent to ECY on 12/28/10</li> <li>ECY letter for extension to 04/18/11 received by ORP on 02/11/11</li> <li>ORP extension acknowledgement letter 11-TF-031 sent to ECY on 02/23/11</li> </ul>
	M-062-40	Submit System Plan to ECY/Select Minimum 3 Scenario's	TBD (ongoing every 3 years)	TBD (ongoing every 3 years)			R. Koll		J. Lyon	Created via CR M-62-09-01 and establishes System Plan milestones
Submit a System Plan to Ecology describing the disposition of all tank waste managed by ORP, including retrieval of all tanks not	M-062-40B	Submit System Plan	10/31/11	10/31/11		_	R. Koll	T. Crawford	J. Lyon	
addressed by the Consent Decree, and the completion of the treatment mission	M-062- 40ZZ	Submit One Time Tank Waste Supplemental Treatment Tech. Report	10/31/14	10/31/14			R. Koll		D. McDonald	
	M-062-45- ZZ	Technologies Selection Report	04/30/15	04/30/15			R. Koll		D. McDonald	
System Plan – WTP Report to Demonstrate WTP Design Meets Vitrification Efficiencies	M-062-49	Submit Report to ECY Demonstrating WTP Design Meets Vitrification Criteria	10/31/11	10/31/11			D. Noyes		D. McDonald	
Complete final design and submit RCRA Part B Permit Modification Request	M-062-31- T01	RCRA Part B Permit ModificationFinal Design	04/30/16	04/30/16			D. Noyes		D. McDonald	

Topic Areas	Document	ORP Delivery to Regulators Date <sup>1</sup>	Anticipated Regulatory Review Completion Date <sup>2</sup>	Final Completion Date <sup>3</sup>	DOE-ORP Lead	Contractor Lead	Regulator Lead	Comments/Issues
	Tier 1 Framework Closure Plan Update	05/31/12			C. Kemp	S. Eberlein	J. Lyon	
	Tier 2 WMA C Closure Plan	05/31/12			C. Kemp	S. Eberlein	J. Lyon	
	WMA C Closure Conceptual Design	09/30/12			C. Kemp	S. Eberlein	J. Lyon	
	All Remaining Closure Plans for WMA C	09/30/15			C. Kemp	S. Eberlein	J. Lyon	
	Tier 3 Closure Plans for Tanks Already Received	TBD	1		C. Kemp	S. Eberlein	J. Lyon	Due 120-day post EIS
	Tier 3 Closure Plans for Additional Tanks	TBD			C. Kemp	S. Eberlein	J. Lyon	Several Dates in out years
DEDMIT DOCUMENTS	WMA C Closure Design	TBD			C. Kemp	S. Eberlein	J. Lyon	Final dates not yet determined
PERMIT DOCUMENTS	DST Exhausters Notice of Construction and HIA	09/30/11			L. Huffman	F. Miera	J. Lyon	
	Supplemental Treatment Technology Notice of Construction	09/30/13			L. Huffman	F. Miera	J. Lyon	
	Submit Part B Permit Application for Selected Supplemental Treatment Technology	09/30/13			L. Huffman	F. Miera	J. Lyon	
	Wiped Film Evaporator Notice of Construction	09/30/14			L. Huffman	F. Miera	J. Lyon	
	Submit Wiped Film Evaporator Class 3 Permit Modification or Part B Permit Application	09/30/14			L. Huffman	F. Miera	J. Lyon	
	IDF Performance Assessment (ORP/WRPS has support role to RL/CHPRC)	09/30/12			T. Fletcher	F. Miera	J. Lyon	
	Process for Coring of an SST	05/30/11				F. Miera	J. Lyon	
	Submit Categorical TOC HIA	09/30/11				F. Miera	J. Lyon	
MISCELLANEOUS DOCUMENTS	RPP-32681, Rev. 1, Process to assess tank farm leaks in support of retrieval and closure planning	03/31/11			J. Johnson	S. Sax	J. Lyon	
	Quarterly Hose-In-Hose Transfer Lines (HIHTL) Reports	Ongoing Quarterly			J. Rambo		J. Lyon	Back-reports submitted via email to ECY, formal letter to be transmitted follow
	C-101, RPP-22520	TBD			C. Kemp	K. Smith	J. Lyon	Pending Approval of 2 <sup>nd</sup> treatment technology
TWODE DOOLINAENTO	C-105, RPP-22520	TBD			C. Kemp	K. Smith	J. Lyon	Pending Approval of 2 <sup>nd</sup> treatment technology
TWRPS DOCUMENTS	C-110, RPP-33116	TBD			C. Kemp	K. Smith	J. Lyon	Pending Approval of 2 <sup>nd</sup> treatment technology
	C-111, RPP-37739	TBD			C. Kemp	K. Smith	J. Lyon	Pending Approval of 2 <sup>nd</sup> treatment technology

<sup>&</sup>lt;sup>1</sup> Note: "ORP Delivery to Regulators Dates" are those dates that support future milestones, are submittal dates for permitting activities, or miscellaneous submittals that support ORP actions and represent the dates when ORP submits documents to the regulators.

Bold red indicates DOE submittal is due within the next 90 days (for TPA milestone documents) Bold green indicates document is currently under ECY Regulatory Review Bold blue indicates the document is completed

<sup>&</sup>lt;sup>2</sup> Note: The "Anticipated Regulatory Review Completion Date" is generated based on TPA Milestone Agreements and TPA Section 9.0 documentation requirements for primary documents. This date will be changed and noted in "Comments/Issues" if extension of review is requested. If the document is a secondary document or for information only, the "Anticipated Regulatory Review Completion Date" may be listed as "N/A" for not applicable.

Note: "Final Completion Date" is entered after the document is reviewed, comments are incorporated, and any disputes are resolved. Any comment resolution issues or disputes will be noted under "Comments/Issues."